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Introduction

The information in the chapters to follow is designed to help you serve your clients in a professional, confident and knowledgeable manner. As you prepare by taking this course and become more confident, the role of the mutual fund sales representative becomes one of guidance. Helping clients through the maze and variety of investment products and choices in today's financial marketplace is a valued service that many clients are seeking.

Uncovering client needs and choosing the right product to meet those needs is the foundation of giving quality advice. By correctly understanding the financial objectives and impact of constraints on the client, you can build strong relationships with your clients. A mutual fund sales representative must also thoroughly know the investment products that are available for meeting clients' needs. If either one of these key elements is weak or lacking, there is a risk that clients will feel poorly served and wrongly advised, and will look to take their business elsewhere.

LEARNING OUTCOME

Many financial services professionals advance their careers by acquiring a license to sell mutual funds, which is a $1.893 trillion industry in Canada as of November 2023. This course will give you the skills you need to work in this exciting investment area.

After taking this course, you will be able to:

- guide clients in their selection of mutual funds and related investment products
- confidently describe and discuss with clients the risk/return characteristics of the different mutual fund classes
- ensure product suitability, the underlying principle of consumer protection regulations
- provide superior client service with respect to mutual fund investments

LEARNING SECTIONS

The course is organized around six learning sections:

SECTION 1: INTRODUCTION TO THE MUTUAL FUND MARKETPLACE

Clearly explains the role of the mutual fund sales representative within the context of client service. It also provides an overview of the financial marketplace, economy, and mutual fund industry.

SECTION 2: THE KNOW YOUR CLIENT COMMUNICATION PROCESS

Outlines and illustrates, through the use of examples, what information is required to know your clients and your products. We also address the process of analyzing this information to ensure investment suitability.

SECTION 3: UNDERSTANDING INVESTMENT PRODUCTS AND PORTFOLIOS

Details the features and risk/return characteristics of the various financial assets, as well as the process of creating and managing investment portfolios.

SECTION 4: UNDERSTANDING MUTUAL FUNDS AND MANAGED PRODUCTS

Thoroughly describes the nature of many mutual fund types, their portfolio risk/return characteristics, and their performance over time. The section also introduces the many types of alternative managed products available in the marketplace.

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SECTION 5: EVALUATING MUTUAL FUNDS

Describes the techniques used to measure and evaluate mutual fund performance so that you can make better decisions when selecting a mutual fund for a client.

SECTION 6: ETHICS, COMPLIANCE AND MUTUAL FUND REGULATIONS

Lists and explains the rules and ethical principles you must adhere to as a mutual fund sales representative. The section also illustrates, via a series of case studies, how mutual fund sales persons integrate client and product knowledge to meet their legal, ethical and professional responsibilities.

COURSE FEATURES

This edition of the Investment Funds in Canada (IFC) textbook was prepared in early 2024. The IFC textbook is updated and revised on a regular basis to better reflect the rapidly changing financial services industry.

The following learning features are included in this edition of the course:

Chapter Outlines: The chapter outline lets you know what content will be covered in the chapter and will prepare you for the material you are about to read.

Learning Objectives: The learning objectives help you to focus your studies on important topic areas. Be sure to read each objective before you begin a chapter; the objectives specify precisely what you are expected to know after reading the chapter and studying the material. To highlight their importance, we have linked each objective directly to the chapter's major headings.

Key Terms: A list of key terms is provided at the start of each chapter. Understanding the terminology and jargon of the mutual fund industry is an important part of your success in this course. Each key term is boldfaced in the chapter and appears in the glossary included at the end of the textbook.

Real Life Case Studies: In almost every chapter a case study is presented that reflects different scenarios that mutual fund representatives may face during their career.

Chapter Summaries: Each chapter closes with a concise summary of the material organized by learning objective. The summaries will help to reinforce the relationship between the material and the chapter learning objectives and may suggest areas of weakness that require further study.

Online Exercises: Online Exercises are provided in each module of your online course. These exercises allow you to practice calculations or test your comprehension of the key concepts presented in the textbook. Every time there is an activity that is relevant to a section, there is an invitation in the textbook to complete the online activity. Also, at the end of each chapter you will be invited online to complete the end of Chapter Exercise and read the Chapter FAQs.

HOW TO USE THIS TEXT

This course package is designed on a self-study basis. The textbook includes examples, review questions and case studies that help you to practice key areas of the material. In terms of studying for the course, we suggest the following:

- Review the learning objectives prior to reading the chapter; the final exam will cover the information required in meeting these objectives.
- Make notes by summarizing the key points under each major heading and learning objective.
- Review the definitions of key terms found in the Glossary.
- After reading the chapter, complete all online exercises, and read the online FAQs to find answers to your questions. They are intended to reinforce your learning and develop your ability to explain and discuss the required knowledge and desired skills.

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The course material is intentionally presented in a learning sequence to help you build on the knowledge from one chapter before moving onto the next. A clear understanding of each chapter is a required foundation for the next one. By completing the text reading, the review questions and case studies, it will prepare you to write the IFC exam.

The term "mutual fund sales representative" has been used mostly through this text to represent the broad base of individuals that sell mutual funds. Depending on the firm or institution you work for, your job title might be different from that of "mutual funds sales representative."

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CSI has been setting the standard for world-class, life-long education for financial professionals for more than 50 years. Having trained over 800,000 global professionals, makes us the preferred partner for individual and corporate financial services education internationally. Our expertise extends from securities to mutual funds, from banking and trust to insurance, from portfolio management to financial planning and wealth management.

CSI is a thought leader whose real-world training sets professionals apart in their field, by developing them into leaders who are able to excel in their chosen careers. Our focus on leading educational and ethical standards means that our graduates have met the highest level of proficiency and certification. We develop course content based on industry trends and continuous involvement from our worldwide partners to ensure our graduates are the most current in every financial sector.

CSI is a partner – Working collaboratively with practitioners and industry regulators leads to a higher educational standard in an evolving financial services marketplace. Anticipating industry requirements allows us to develop relevant curriculum and testing for real-world application.

CSI grants designations that have become a true measure of expertise. We focus on state of the art industry knowledge that is the recognized standard for regulatory authorities, financial organizations and associations in Canada and around the globe. Our graduates come with highly endorsed credentials respected throughout the financial services industry.

CSI is valued for its expertise in both course content and program delivery. CSI has established professional designations in growing specialties like financial derivatives and wealth management, adding to our respected and established courses and seminars. We've also pioneered the use of the Internet as a powerful tool for teaching and professional development, launching online courses and study aids.

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3 Overview of Economics
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SECTION 1

INTRODUCTION TO THE MUTUAL FUND MARKETPLACE

1. The Role of the Mutual Fund Sales Representative
2. Overview of the Canadian Financial Marketplace
3. Overview of Economics

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SECTION 1 | INTRODUCTION TO THE MUTUAL FUND MARKETPLACE

Section 1 introduces the role of the mutual fund sales representative and the products that make up the financial marketplace. This first section consists of three chapters. Chapter 1 covers the role of the mutual fund sales representative. We define this role, explain why it exists and gives an example of what the job involves. The chapter also provides you with an overview of the mutual funds industry from a historical perspective.

Chapter 2 covers an overview of the Canadian financial marketplace. We include an introduction to financial markets and review the market participants that make up those markets. The current regulatory framework is also introduced in this chapter.

Chapter 3 introduces the concepts of economics. We provide an overview of the laws that govern microeconomics and discuss the elements of macroeconomics, including national income, gross domestic product, interest rates and inflation, among others.

These three chapters provide you with the foundation to work from as you study the material presented in this course.

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The Role of the Mutual Fund Sales Representative

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CONTENT AREAS

- How Has the Mutual Fund Industry Evolved?
- What Is the Value in Licensing?
- Why Provide Excellent Client Service?
- Why Is Understanding your Clients and Products Important?
- Know Your Client, Know Your Product and Suitability
- What Is the Role of a Mutual Fund Sales Representative?
- Mutual Fund Sales in Practice

LEARNING OBJECTIVES

1 | Describe the evolution of the mutual fund industry and the impact mutual funds have had on the financial services marketplace.

2 | Explain the value of becoming a licensed mutual fund sales representative and how it prepares you to deal more confidently with clients to protect their interests and provide quality advice.

3 | Discuss the importance of providing excellent client service.

4 | Identify the legal, ethical and professional responsibilities of a mutual fund sales representative.

5 | List and describe the six components of knowing your client.

6 | Describe the important role a mutual fund sales representative plays in the client relationship, and explain how this role differs from that of a financial planner.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

client service

compliance

disclosure

ethical conduct

ethical responsibility

ethics

financial planner

fund facts

investment fund

Know Your Client

Know Your Product

legal responsibility

mutual fund

mutual fund sales representative

net worth

professional responsibility

prospectus

suitability

volatility

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INTRODUCTION

A **mutual fund** is an investment vehicle that pools contributions from investors and invests these proceeds into a variety of securities, including stocks, bonds and money market instruments. Individuals who contribute money become share or unit holders in the fund and share in the income, gains, losses and expenses the fund incurs in proportion to the number of units or shares that they own. Professional money managers manage the fund's assets by investing the proceeds according to the fund's policies and objectives and based on a particular investing style.

The mutual fund industry in Canada has experienced tremendous growth over the past several decades, both in choice of products available to investors and in the dollar value of assets under management. Accordingly, the industry offers mutual fund sales representatives and investors many opportunities and challenges. Are mutual funds ideal for all investors? As we will learn in this chapter and throughout the course, there is no one perfect investment that suits all investors; however, it is worthwhile to point out that mutual funds have become important investment products for many investors.

Although they may seem simple and nearly universally available, mutual funds are in fact a complex investment vehicle. Available in a variety of different forms and through a variety of different distribution channels, they may be one of the most visible vehicles for many investors. The funds themselves are subject to a range of unique provisions and regulations; thus, it is important to ensure a full understanding of this particular investment vehicle.

This first chapter provides you with a brief history of mutual funds and explores the role of the mutual fund sales representative.

NOTE

As of January 1, 2023, the former Investment Industry Regulatory Organization of Canada (IIROC) and the Mutual Fund Dealers Association of Canada (MFDA) were amalgamated to form the Canadian Investment Regulatory Organization (CIRO).

HOW HAS THE MUTUAL FUND INDUSTRY EVOLVED?

Investment products vary over time with changing economic and social conditions. Among the investment products known as **investment funds** that offer investors access to a portfolio of securities, mutual funds represent a fairly recent development. They have evolved from earlier types of investment funds with which they still compete for investment dollars. Overall, the evolution of the mutual fund industry has been characterized by significant growth in the number of funds available, the popularity of those funds with small investors, and the dollar value of fund assets under management.

A BRIEF HISTORY OF MUTUAL FUNDS

Financial historians generally agree that mutual funds are more than two centuries old. Some believe they had their start in the Netherlands in 1774, while others point to the modern mutual fund having its start in England in the mid-1800s. Regardless of where mutual funds started out, their popularity grew steadily, primarily because of their design.

For many investors, building a portfolio of individual stocks can be a costly venture. There are the fees associated with buying stocks, not to mention the time involved in researching individual companies. Mutual funds solved this problem by giving investors who have minimal funds to invest access to a product that offered a professionally managed and diversified portfolio of securities at a relatively low cost.

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HISTORY OF THE CANADIAN MUTUAL FUND INDUSTRY

The number of mutual funds in Canada grew slowly until after the Second World War. During the 1950s and 1960s, the number of mutual funds grew dramatically. The 1970s, however, was a difficult period for stock market investors, and the mutual fund industry did not experience the same level of rapid growth. A better market climate in the 1980s and 1990s, in combination with other factors, resulted once again in a period of strong growth in mutual funds.

Canada's financial services landscape also played an important role in contributing to this strong growth. The chartered banks aggressively entered the mutual fund market in the early 1980s and this helped to lay the groundwork and distribution channels for the strong growth that was to follow.

The following timeline gives you an idea of the evolution of the mutual fund industry in Canada.

1930s	Three mutual funds open for business in Canada.
1960s	30 mutual funds and total assets under management of about $560 million. Total assets double to almost $1 billion by the middle of the decade.
1980s	Chartered banks enter the industry. Number of funds grows from about 80 to 400 by the end of the decade.
2000s	Assets under management reached about $400 billion.
2020s	Assets under management approached $2 trillion.

Source: IFIC Industry Overview, November 2023 – https://www.ific.ca

WHAT IS THE VALUE IN LICENSING?

In Canada, individuals who sell financial products, such as mutual funds, insurance, stocks, or who have specific duties within a financial services company, such as portfolio management or supervisory responsibilities, are required to meet educational, employment and work experience criteria in order to be licensed. Once the licensing requirements have been met, the application for registration is handled either by your employer or, if you are working independently, by a sponsoring financial services firm. After you are licensed, you may also be required to take further educational courses to maintain your license. Your license has clear value to you and your clients in establishing investor relationships and participating in the mutual fund industry.

Acquiring your license to deal with clients as a mutual fund sales representative has value because it demonstrates:

- You are committed to your professional development, which shows your clients that you understand the features, characteristics, and types of mutual funds in the market.
- You have achieved a level of competence in understanding the importance of making recommendations that are suitable based on knowing your client.
- You understand the importance of your fiduciary responsibility of care to always deal with clients in an ethical manner.
- You understand the responsibility regulators play in protecting the integrity of the industry.

HOW THIS COURSE PREPARES YOU

This course covers a wide range of topics related to understanding mutual funds from a product, client, and regulatory perspective. Meeting client needs is the focal point of any relationship and the better informed you are, the greater the likelihood of successful client relationships. These relationships are built on trust—the trust clients put in you to help them fulfill their financial needs and the confidence you show by knowing your client and the products you are recommending.

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Keep in mind however, that this course is just the beginning. As you progress and begin to deal with more sophisticated clients, your education and training will also need to change, becoming more specialized to meet the changing needs of your clients. Additionally, you may need to satisfy continuing education requirements throughout your career, depending on the industry licenses you acquire. This can only be viewed positively from a client's perspective, because it shows your commitment to staying current and keeping your skills sharp.

WHY PROVIDE EXCELLENT CLIENT SERVICE?

In virtually every type of business, providing excellent **client service** has become the business differentiator. But what does client service mean? Generally, it means:

- Fully understanding client needs, and then
- Identifying the "right" solutions to satisfy those needs

The mutual funds business is no exception; every client is unique. Providing excellent client service has important rewards and is perhaps the most critical aspect of your job.

REWARDS FOR PROVIDING EXCELLENT CLIENT SERVICE

The rewards for providing excellent client service are substantial. Happy clients:

- Come back for repeat business.
- They bring more business to your institution because they tell their friends and families about you.
- They buy other related products and services because they are satisfied when they deal with you.

WHY CLIENT SERVICE IS SO CRITICAL

This course is about mutual funds and investing in and recommending mutual funds to clients. On another level, however, the course is really about providing first-rate client service as an employee or independent representative of a mutual fund dealer. It might seem strange to begin with client service, especially when you might already be providing excellent client service for your organization.

There are, however, two important reasons why client service is a central issue here:

- Mutual funds are subject to sales regulations and disclosure requirements, and this demands a specialized client service approach.
- The rapidly changing financial services environment requires you to understand the characteristics and purpose of many products.

We deal with client service early in the course because it is imperative that client service be thought of first and mutual fund strategizing second. This concept is one of the core considerations contemplated by regulators when the rules that govern mutual funds are enhanced. Two of these enhancements are the Client Focused Reforms and the guiding principle to always put client interests first. These enhancements will be explained in more detail as you progress through the course.

WHY IS UNDERSTANDING YOUR CLIENTS AND PRODUCTS IMPORTANT?

For many clients, the purchase of mutual funds can be a new experience. Some clients wanting to buy mutual funds know little about the nature of the funds offered. Often, they are not sure which fund they should buy. Not all

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clients have the skill or knowledge to judge whether a particular mutual fund investment is suitable. Many of them will look to you for guidance. This means that you have special responsibilities for understanding your industry, its products, and the clients who come to you for help.

TYPES OF RESPONSIBILITY

When dealing with clients, you have legal, ethical and professional responsibilities:

Legal Responsibility

You must ensure any investment you recommend or client order that you accept is suitable for the client. An investment is suitable if it fits the client's investment needs and objectives, personal and financial circumstances, investment knowledge, risk profile and investment time horizon. All provincial securities acts make this legal responsibility clear.

Ethical Responsibility

You must place your client's needs before your own needs (such as reaching a sales target) or those of your dealer. You should be aware that sales incentives that encourage promotion of one product over another are prohibited and are subject to regulatory scrutiny. As such, you should always be prepared to justify your recommendations by maintaining adequate evidence of your suitability discussions in your client summary meeting notes.

Professional Responsibility

You must provide the best client service possible. You can meet all these responsibilities if you know your client, know your products, and know that you have the obligation to refuse to sell an unsuitable product to the client. To develop successful client relationships, you must earn a client's respect and trust. You can accomplish this through good business practices as well as through ethical behaviour that reflects well on the profession and its practitioners.

PERSONAL TRUST, ETHICS AND COMPLIANCE

The mutual fund industry is based on trust and confidence. As a consequence, even though the industry already has many rules and regulations, mutual fund professionals must conduct themselves in an ethical manner. Every year, your organization likely requires that you sign a "code of conduct" outlining the important aspects of protecting client information, maintaining client confidentiality, and following best practices.

In addition to expectations of ethical conduct, the mutual fund industry also sets out rules and regulations that cover the compliance aspects of the sale of mutual funds.

- **Compliance** means following the rules, whether those rules are legal requirements or dealer policies. If you are not in compliance, you may be held liable and subject to dismissal.
- **Ethical conduct** involves complying not only with the letter of the law but also with the spirit of the law. **Ethics** are moral principles that go beyond prescribed behaviour and addresses situations where rules are unclear or contradictory. It is possible to behave unethically even when complying with the rules.

As a mutual fund sales representative, you may have a fiduciary responsibility to your clients (i.e., a responsibility to always put the client's interests first). Criteria that may be used to determine whether a fiduciary duty is present in a mutual fund sales representative-client relationship include a high degree of reliance by the client on the representative's advice and the vulnerability of the client. To ensure that the client's needs are met, you must gather specific information from the client. The Know Your Client (KYC) rule imposes a higher standard of care on you than if you were merely executing the client's orders. The mutual fund sales representative-client relationship requires that you act carefully, honestly, and in good faith when dealing with the client, and do not take advantage of the trust the client has placed in you.

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EXAMPLE

A retired couple with little investment experience told an advisor that they required a secure monthly income from their investments to maintain their current standard of living. Following the advisor's advice, the couple invested the bulk of their money in equity mutual funds on the assurance that such investments were safe. The couple eventually suffered large losses on their investments after a sudden and severe market downturn. The court found liability on several grounds, including negligence for the firm's failure to follow the KYC rule and choose suitable investments for the couple.

When disputes between mutual fund sales representatives and clients are resolved through civil litigation, the courts generally hold that the mutual fund sales representative owes a fiduciary duty to the client. The existence of such a duty imposes a high standard of care upon the representative.

An example of an area for compliance is the disclosure rule. Full, true, and plain **disclosure** of facts is necessary to make reasonable investment decisions. The fund facts document issued by mutual funds must disclose enough detail for the client to make an informed investment decision. The **fund facts** document is designed to be no more than four pages in length and gives investors key information that is relevant to their investment decisions, including facts about the fund itself, performance history, investments, and the costs of investing in the fund. The client can also request the mutual fund's **prospectus**, which provides greater detail than the fund facts document and is much greater in length. The subject of fund facts documents and mutual fund prospectuses are covered in more detail later in the text.

KNOW YOUR CLIENT, KNOW YOUR PRODUCT AND SUITABILITY

On October 3, 2019, the Canadian Securities Administrators (CSA) released its final amendments to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. This initiative, known as the Client Focused Reforms (the CFRs), made changes to the representative conduct requirements with the following intent:

- To better align the interests of securities advisers, dealers, and representatives (registrants) with the interests of their clients
- To improve outcomes for clients
- To clarify for clients the nature and terms of their relationship with registrants

The CFR initiative is based on the concept that client's best interests must come first in the client-registrant relationship. CIRO has aligned its rules with the CSA CFR amendments.

ABOUT THE CFRs

Over the past few decades, the securities industry has changed from a transactional, trading focused environment to one where advice and guidance exemplify the role and expectations of mutual fund sales representatives.

Ensuring that each investment recommendation is suitable has become a fundamental obligation of all representatives. You must appreciate, apply, and document the components of suitability, a requirement at the intersection of the **Know Your Product** (KYP) and **Know Your Client** (KYC) rules (which we discuss later in the course).

The CFRs cover enhanced expectations regarding KYC determination and KYP research, along with rules on conflicts of interest and implementation of a trusted contact person requirement. The CFRs are aimed at enhancing the standards of conduct in the securities industry and better aligning the expectations of customers with their firms. These new regulations became effective on December 31, 2021, and CIRO-regulated firms were mandated to comply with them. These regulatory reforms will translate into stronger processes to further support a winning team approach and demonstrate an ongoing commitment to putting customers first.

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The three pillars of registrant expectations are suitability, KYC, and KYP. While these pillars, along with other rules and regulations, are affected by the CFRs, what follows is a brief introduction to these important cornerstones of the industry. A more detailed discussion of these concepts and the CFRs can be found in Chapter 17.

One way of integrating ethics into rules compliance is through ensuring the suitability of investment recommendations for a particular client. **Suitability** means ensuring that all recommendations:

- take into account the client's unique situation and investment objectives;
- are based on the sales representative's understanding of the client's personal and financial situation; and
- are based on the sales representative's knowledge of the investment products being recommended.

The KYC rule states that you must take reasonable steps to learn the essential facts relevant to every client and every order. Information concerning the client's financial status (both income and net worth), family and other commitments, as well as financial goals, is required to make an appropriate investment recommendation.

What if the client refuses to provide the information that you need to make a decision? The client may say, "Take my order or I'm leaving!" If you cannot determine investment suitability, but go ahead and accept the client's order, then you will have violated securities law. You will have exposed your dealer and yourself to legal action should the client sue. You will have done a disservice to yourself, your employer and the client. No one likes to turn away a client, but your legal, ethical and professional responsibilities might require you to do so in some cases.

Clients who do not believe they will benefit from providing you with detailed information may be right. In some cases, clients may have more investment knowledge than you. There may be little you can do to improve on their decisions. In other cases, clients may think they know more than they actually do. In any case, you must rely on the legal requirement to assess and interpret a client's KYC to ensure suitability. If you cannot determine investment suitability, then you should not accept the order.

Knowing your clients means knowing their:

1. personal circumstances
2. financial circumstances
3. investment needs and objectives
4. investment knowledge
5. risk profile (in terms of risk capacity and tolerance)
6. investment time horizon (in terms of the client age and time available to invest)

We cover these six interrelated components more fully in Chapter 4 in the discussion on analyzing client data and information.

Related to knowing your client is the notion of knowing your product. In the case of mutual funds, KYP is a question of understanding all the characteristics of the funds you are recommending to clients. You must understand the investment's structure, features, risks, initial and ongoing costs and the impact of those costs. You must also document your KYP research efforts and maintain such notes in the client file. In addition, the representative must only consider those investments that have been approved by the Member. If the representative's Member firm has not approved an investment, the representative cannot make the investment available to the client.

Once you know your client and your product, you can assess and demonstrate why an investment product is right or wrong for your client. Product knowledge is a key element in determining suitability. The question of suitability ultimately comes down to whether the investment's risk and return characteristics fit the client's KYC characteristics. If you know your clients and your products, then you can make sure your clients avoid inappropriate investments. That is what it takes to fulfill your legal, ethical, and professional responsibilities.

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WHAT IS THE ROLE OF A MUTUAL FUND SALES REPRESENTATIVE?

As a **mutual fund sales representative**, you play the important role of ensuring that clients' purchases are suitable given their predetermined financial goals, financial circumstances, personal circumstances, investment knowledge, risk profile, and investment time horizon. You and your client will work together to obtain the necessary information and then judge whether the client's characteristics fit the characteristics of any investment products the client might have in mind. When the fit is poor, you must explain to your client why the product is unsuitable and, where feasible, suggest suitable alternatives.

In some cases, the role of the mutual fund sales representative is very simple. For example, many clients will quickly be able to provide reasons for their purchase (their goals) and will indicate that they have considered their financial condition and are aware of the investment risks that a mutual fund might present. Some clients are highly sophisticated investors. In these cases, it is easy to ensure suitability. In other cases, with less sophisticated clients, you must carefully document the client's goals and circumstances and carefully explain the nature of the products the client has in mind. In many cases, you will play the role of an educator – and that just makes good business sense.

At the same time, there are limits to your role. Clients generally are looking for solutions to attain financial goals through mutual fund offerings. However, your role does not extend to helping clients with developing a financial plan through establishing household budgets, for example. This would be the role of a **financial planner**.

In situations where clients require planning to attain their goals, your role is to refer the client to persons qualified to give advice in the appropriate specialist area. A mutual fund sales representative may only provide guidance on mutual funds and only after obtaining a mutual funds license. If you think that a particular client would be interested in individual stocks, then he or she must be directed to a salesperson who is registered to sell those securities. Your mutual fund registration restricts you to speak only about mutual fund products.

MUTUAL FUND SALES IN PRACTICE

You will examine all the elements of providing guidance in detail as you move through the text. At this point, however, you might be curious about the actual job of a mutual fund sales representative. Following is an example of investment guidance in action. In the example, some basic knowledge of mutual funds is assumed, so don't worry if some aspects are unclear. The case is meant only to provide you with a sense of the mutual fund professional's role.

Exhibit 1.1 | Investment Guidance in Action (*for information purposes only*)

Background

You are a registered mutual fund sales representative meeting with a new client for the first time.

In situations like this, you begin by filling out your dealer's mutual fund application form. These forms typically have sections for:

- The applicant's name, address, and birth date.
- The amount of money the client wishes to invest.
- Investment needs and objectives, investment knowledge, annual income, and net worth. **Net worth** is the value of all of the client's assets after subtracting outstanding liabilities such as loan and mortgage balances.
- An evaluation of the client's risk profile.

There are other areas to be filled out on the form as well.

The section for client information is there to help you ensure that you know your client, as the law requires. If a client refuses to provide this information, then you cannot legally sell him or her a mutual fund investment.

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Exhibit 1.1 | Investment Guidance in Action (*for information purposes only*)

In our example, assume that you have obtained the client's name, address, and birth date. His name is Dave Wills, he is single, lives in London, Ontario, and is 29 years old.

The Interview

You start off with a few client-related questions you are legally obligated to ask to ensure that Mr. Wills invests only in suitable funds. You work toward understanding his personal and financial circumstances.

Your questions also deal with his investment needs and objectives. Mr. Wills is starting to save for a down payment on a house and needs to have that money in about two or three years. This information is important because the short length of Mr. Wills' investment horizon makes some mutual funds unsuitable. In your own mind, you have already limited him to a money market fund, or perhaps a bond fund. Equity funds would not work with a short investment horizon.

Together with Mr. Wills, you complete a questionnaire, being careful to define each KYC option and any industry terms. You know that working through the KYC determination process thoroughly will go a long way toward accurately identifying the most appropriate investor profile for your client. Mr. Wills has a moderate willingness to accept risk and a moderate ability to endure a financial loss. This is critical information since mutual funds are not suitable for highly risk averse investors. The only exception to this rule might be money market funds, but even that is questionable. Highly risk tolerant investors are suitable mutual fund clients, but you would tend to see few of them, because this type of investment does not usually interest them. Given Mr. Wills' risk profile, he continues to be a candidate for mutual funds. You complete your meeting and document all discussed details in your advisor notes, so that you have a record of your compliance with your ongoing fiduciary regulatory duties.

Mr. Wills has a net worth of about $40,000, made up of the balances of two savings accounts, and an annual income of $42,000. Based on the information you have so far, you would be surprised if Mr. Wills said that he had excellent or even moderate investment knowledge, because a moderately knowledgeable, moderately risk tolerant client with a net worth of $40,000 would probably already have some type of mutual fund or other investment besides savings accounts. In response to your question, Mr. Wills describes his investment knowledge as poor.

Investment Guidance

By this point, you know enough about Mr. Wills to provide some guidance. You have ruled out equity mutual funds. You believe that he could probably tolerate some investment risk. You also know that he is not a knowledgeable investor. With this information in mind, you ask Mr. Wills if he has selected a type of mutual fund of the three that you offer. He answers that he would like to invest $10,000 in the equity fund. A relative told him that he could get the best returns with equity funds.

You must now clearly explain that, while it is true that equity funds should provide a better return than either bond or money market funds over the longer term, they are among the riskiest of all mutual funds. That means that over shorter periods, equity funds might fall and then not rise again until well after the investor needs the money. In Mr. Wills' case, in the first year, the equity fund might do very well, but in the second year, it might do very poorly. If Mr. Wills needs the money at the end of the second year, he might find that his capital has declined. For this reason, given Mr. Wills' short investment time horizon, equity funds are not suitable.

You next explain that this problem of fluctuating value (known as **volatility**) is not as pronounced with most bond funds and hardly exists at all with money market funds.

In cases like this, when the client does not have much investment knowledge, it is particularly important to explain as much as you can about the risk characteristics of suitable and unsuitable funds. Documents, known as the fund facts and the prospectus, describe these characteristics for each fund. You will give a copy of the fund facts document (and prospectus upon request) to the client, but it would be helpful to point out, and even read through, key areas of concern, such as the fund's investment objectives. In Mr. Wills' case, you could read the warning about equity fund volatility contained in the fund facts or prospectus and contrast this with the objectives of the money market and bond funds.

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Exhibit 1.1 | Investment Guidance in Action (*for information purposes only*)

The Decision

Mr. Wills asks whether you think the bond fund is the more suitable choice of the remaining two funds. In response, you ask Mr. Wills to fill out a special questionnaire designed by your firm that will lead to a recommended mutual fund portfolio made up of some of the funds offered. Mr. Wills fills out the questionnaire and the resulting suggested portfolio is 5% equity mutual fund, 10% bond fund and 85% money market fund.

Mr. Wills decides to invest the $10,000 in the suggested mutual fund portfolio.

Legal, ethical and professional responsibilities — notice how you have successfully taken them in charge.

- First, you respected legal requirements by the care you took in making sure that the investments made by the client were suitable given his objectives, financial and personal circumstances, investment knowledge, risk profile, and investment time horizon.
- Second, you fulfilled your ethical responsibility by looking after the client's needs rather than your own or your dealer's needs. In this case, you have recommended that most of the client's capital be invested in a money market mutual fund. Money market mutual funds generate lower fees for the financial institution's mutual fund dealer-subsidiary than other types of mutual funds.
- Finally, by carefully obtaining critical client information and using it to guide and inform, you have acted professionally. Because you have provided excellent client service, you have increased the likelihood that Mr. Wills will continue to invest with your institution.

Case Study | A Day in the Life of a Mutual Fund Representative: Mary Gets Set for Success (*for information purposes only*)

Mary, a mutual fund sales representative at a major Canadian financial institution, begins her working day watching business channels to get up to date on the previous day's news and any overnight developments, setting her up to be well-prepared to address questions from clients and colleagues. Upon her arrival at the office, Mary reviews her schedule for that day's meetings. She notices that she has two meetings booked, one with a brand-new client to investing and one where she will be reviewing a client's existing portfolio.

For the first meeting, Mary prepares the necessary documents to set up a new account. She reviews to ensure that she is well prepared to discuss the fundamental principles of investing to help her new-to-investing client establish a solid foundation of investment knowledge. Her primary goal will be to help her client articulate their investment goals. Also, she wants to establish a clear understanding of the client's risk tolerance and their time horizon. All of this information will help ensure that Mary provides the right investment solutions to set the client on the right path for their investment journey.

For her second meeting, Mary reviews her client's investment profile and existing mutual fund holdings, checking that the client's portfolio is properly aligned to their KYC profile and reflecting their stated goals. Mary notices that the client's portfolio has drifted from the strategic asset allocation since their last review six-months ago, so she prepares appropriate recommendations to re-align the client's portfolio. She also prepares some recommendations for the client to consider replacing existing mutual funds with funds that are providing similar gross returns but with lower fees – thereby enhancing the client's potential returns.

Now, Mary is set-up for success and ready to provide excellent client service to her clients.

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TERMINOLOGY REVIEW

How familiar are you with the terminology you have been introduced to in this chapter? Complete the online learning activity to assess your knowledge.

Note: To access the online components of your course, login to your Student Profile at www.csi.ca and, once logged in, click on the 'Access Online Courses' button.

YOUR RESPONSIBILITIES AND YOUR CLIENT

How well do you know the different responsibilities of a mutual fund representative, and how well do you know your client? Complete the online learning activity to assess your knowledge.

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SUMMARY

After reading this chapter, you should be able to:

1. Describe the evolution of the mutual fund industry and the impact mutual funds have had on the financial services marketplace.
   - The growth in the demand for mutual funds can be tied to their design: investors who have minimal funds to invest have access to a product that offers a professionally managed and diversified portfolio of securities at a relatively low cost.
   - The mutual fund industry in Canada grew dramatically in the 1980s and 1990s, spurred by a declining interest rate market, the chartered banks entering the fund industry, and a proliferation of choice in the number of funds available.
2. Explain the value of becoming a licensed mutual fund sales representative and how it prepares you to deal more confidently with clients to protect their interests and provide quality advice.
   - Individuals who sell financial products such as mutual funds are required to meet educational, employment and work experience criteria in order to be licensed.
   - Meeting client needs is the focal point of any relationship and the better informed you are the greater the likelihood of successful client relationships.
3. Discuss the importance of providing excellent client service.
   - Client service means fully understanding client needs and identifying the right solutions to satisfy those needs.
   - The rewards for providing excellent client service include repeat business and the potential for expanding your client base.
4. Identify the legal, ethical and professional responsibilities of a mutual fund sales representative.
   - Your legal responsibility ensures that any investment you recommend is suitable for the client.
   - Your ethical responsibility ensures that client interests are placed ahead of your own needs and those of your dealer.
   - Your professional responsibility is to provide the best client service possible.
5. List and describe the six components of knowing your client.
   - Knowing clients means knowing their personal and financial circumstances, investment needs and objectives, investment knowledge, risk profile, and time horizon.
   - Knowing your product is a question of understanding all the characteristics of the funds you are recommending to clients.
6. Describe the important role a mutual fund sales representative plays in the client relationship, and explain how this role differs from that of a financial planner.
   - The mutual fund sales representative plays the important role of ensuring that client mutual fund purchases are suitable.
   - Depending on the investing experience of clients, you will also play the role of educator.
   - It is also important to recognize what services you cannot provide, for example financial planning.
   - In situations where clients require planning to attain those goals, your role is to refer the client to persons qualified to give advice in the appropriate specialist area.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 1 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 1 FAQs.

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Overview of the Canadian Financial Marketplace

2

CONTENT AREAS

- **What Is Investment Capital?**
- **What Are the Financial Instruments?**
- **What Are the Financial Markets?**
- **Who Are the Different Financial Intermediaries?**
- **What Is the Canadian Securities Regulatory Framework?**

LEARNING OBJECTIVES

1 | Define investment capital and describe the role played by suppliers and users of capital in the economy.

2 | Describe and differentiate among the types of financial instruments used in financial market transactions.

3 | Describe the roles and distinguish among the different types of financial markets and define primary and secondary markets.

4 | Describe the roles of the financial intermediaries in the Canadian financial services industry.

5 | List the industry regulators and their main functions and requirements affecting mutual fund sales representatives.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

ask price

auction market

Autorité des marchés financiers (AMF)

bid price

Canadian Investment Regulatory Organization (CIRO)

capital

Chambre de la sécurité financière

dealer market

derivatives

equities

financial intermediaries

financial market

fixed-income securities

foreign investors

initial public offering

institutional investors

investment fund

liquidity

mutual fund

open-end fund

over-the-counter (OTC)

primary market

retail investors

secondary market

securities

self-regulatory organization

source of capital

stock exchange

underwriting

users of capital

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INTRODUCTION

The Canadian financial services industry plays a significant role in sustaining and expanding the Canadian economy. The industry grows and evolves to meet the ever-changing needs of Canadian investors, both from domestic and international perspectives.

In some way, we are all affected by the financial services industry. The vital economic function the industry plays is based on a simple process: the transfer of money from those who have it (savers) to those who need it (users). This capital transfer process is made possible through the use of a variety of financial instruments: stocks, bonds, mutual funds and derivatives. Financial intermediaries, such as banks, trust companies, and investment and mutual fund dealers, have evolved to make the transfer process efficient.

This chapter introduces the Canadian financial system and its participants: investment markets, products, intermediaries, and the regulatory environment.

For those new to this material, we offer a suggestion: stay informed about the markets and the industry because it will help you better understand the material presented in this textbook. There are countless sources of financial market information, including newspapers, the Internet, books and magazines. The course material will be easier to grasp if you can relate it to the activity that unfolds each day in the financial markets. Ultimately, this will help you achieve your goal of becoming an informed and effective participant in the mutual fund industry.

WHAT IS INVESTMENT CAPITAL?

In general terms, **capital** is wealth – both real, material things such as land and buildings, and representational items such as money, stocks and bonds. All of these items have economic value. Capital represents the invested savings of individuals, corporations, governments and many other organizations and associations. It is in short supply and is arguably the world's most important commodity.

Capital savings are useless by themselves. Only when they are harnessed productively do they gain economic significance. Such utilization may take the form of either direct or indirect investment.

- Capital savings can be used directly by, for example, a couple investing their savings in a home; a government investing in a new highway or hospital; or a domestic or foreign company paying start-up costs for a plant to produce a new product.
- Capital savings can also be harnessed indirectly through the purchase of such representational items as stocks, bonds or mutual funds or through the deposit of savings in a financial institution.

Indirect investment occurs when the saver buys the securities issued by governments and corporations, who in turn use the funds for direct productive investment – equipment, supplies, etc. Such investment is normally made with the assistance of the retail or institutional sales department of investment firms.

CHARACTERISTICS OF CAPITAL

Capital has three important characteristics. It is mobile, sensitive to its environment and scarce. Therefore capital is extremely selective. It attempts to settle in countries or locations where government is stable, economic activity is not over-regulated, the investment climate is hospitable and profitable investment opportunities exist.

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The decision as to where capital will flow is guided by country risk evaluation, which analyzes such things as:

The political environment:	whether the country is involved or likely to be involved in internal or external conflict.
Economic trends:	growth in gross domestic product, inflation rate, levels of economic activity, etc.
Fiscal policy:	levels of taxes and government spending and the degree to which it encourages savings and investment.
Monetary policy:	the sound management of the growth of the nation's money supply and the extent to which it promotes price and foreign exchange stability.
Investment opportunities:	opportunities for investment and satisfactory returns on investment when considering the risks.
Characteristics of the labour force:	whether it is skilled and productive.

Because of its mobility and sensitivity, capital moves in or out of countries or localities in anticipation of changes in taxation, exchange policy, trade barriers, regulations, government attitudes, etc. It moves to where the best use can be made of it and attempts to avoid areas where the above factors are not positive. Thus, capital moves to uses and users that reliably offer the highest returns. Capital is scarce worldwide and is in great demand everywhere.

SOURCES AND USERS OF CAPITAL

The only **source of capital** is savings. When revenues of non-financial corporations, individuals, governments and non-residents exceed their expenditures, they have savings to invest.

Non-financial corporations, such as steel makers, food distributors and machinery manufacturers, have historically generated the largest part of total savings mainly in the form of earnings, which they retain in their businesses. These internally generated funds are usually available only for internal use by the corporation and are not normally invested in other companies' stocks and bonds. Thus, corporations are not important providers of permanent funds to others in the capital market.

Individuals may decide, especially if given incentives to do so, to postpone consumption now in order to save so that they can consume in the future. Governments that are able to operate at a surplus are "savers" and able to invest their surpluses. Other governments are "dis-savers" and must borrow in capital markets to fund their deficits.

Non-residents, both corporations and private investors, have long regarded Canada as a good place to invest. Canada has traditionally relied on savings for both direct plant and equipment investment in Canada and portfolio investment in Canadian securities.

SOURCES OF CAPITAL

Retail, institutional, and foreign investors are a significant source of investment capital.

Retail investors	**Retail investors** are individual investors who buy and sell securities for their own personal accounts, and not for another company or organization.
Institutional investors	**Institutional investors** are organizations, such as a pension fund or mutual fund company, that trade large volumes of securities and typically have a steady flow of money to invest. Retail investors generally buy in smaller quantities than larger, institutional investors.

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Foreign investors	**Foreign investors** also are a significant source of investment capital. Historically, Canada has depended upon large inflows of foreign investment for continued growth. Foreign direct investment in Canada has tended to concentrate in particular industries: manufacturing, petroleum and natural gas, and mining and smelting. Some industries also have restrictions with respect to foreign investment.

USERS OF CAPITAL

Based on the simplest categorization, the **users of capital** are individuals, businesses and governments. These can be both Canadian and foreign users. The ways in which these groups use capital are described below.

INDIVIDUALS

Individuals may require capital to finance housing, consumer durables (e.g., automobiles, appliances) or other types of consumption. They usually obtain it through incurring indebtedness in the form of personal loans, mortgage loans or charge accounts. Since individuals do not issue securities to the public and the focus of this text is on securities, individual capital users are not discussed further.

Just as foreign individuals, businesses or governments can supply capital to Canada, capital can flow in the other direction. Foreign users (mainly businesses and governments) may access Canadian capital by borrowing from Canadian banks or by making their securities available to the Canadian market. Foreign users will want Canadian capital if they feel that they can access this capital at a less expensive rate than their own currency. Access to foreign securities benefits Canadian investors, who are thus provided with more choice and an opportunity to further diversify their investments.

BUSINESSES

Canadian businesses require massive sums of capital to finance day-to-day operations, to renew and maintain plant and equipment as well as to expand and diversify activities. A substantial part of these requirements is generated internally (e.g., profits retained in the business), while some is borrowed from financial intermediaries (principally the chartered banks). The remainder is raised in securities markets through the issuance of short-term money market paper, medium- and long-term debt, and preferred and common shares.

GOVERNMENTS

Governments in Canada are major issuers of securities in public markets, either directly or through guaranteeing the debt of their Crown corporations.

Federal Government	When revenues fail to meet expenditures and/or when large capital projects are planned, the federal government must borrow. The government makes use of two main instruments: treasury bills (T-bills) and marketable bonds.
Provincial Governments	Like the federal government, the provinces issue debt directly themselves. When revenues fail to meet expenditures and/or when large capital projects are planned, provinces must borrow. They may issue bonds to the federal government or borrow funds from Canada Pension Plan (CPP) assets (or the Québec Pension Plan in the case of Québec). Alternatively, a province may issue debt domestically through a syndicate of investment dealers who sell the issue to financial institutions or to retail investors. In addition to conventional debt issues, some provinces issue their own short-term treasury bills and, in some cases, their own savings bonds.

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Municipal Governments	Municipalities are responsible for the provision of streets, sewers, waterworks, police and fire protection, welfare, transportation, distribution of electricity and other services for individual communities. Since many of the assets used to provide these services are expected to last for twenty or more years, municipalities attempt to spread their cost over a period of years through the issuance of instalment debentures (or serial debentures).

SOURCES AND USERS OF CAPITAL

Who are the typical sources of capital and users of capital? *Complete the online learning activity to assess your knowledge.*

WHAT ARE THE FINANCIAL INSTRUMENTS?

Transferring money from one person to another may seem relatively straightforward. Why, then, do we need formal financial instruments called securities?

As a way of distributing capital in a large, sophisticated economy, securities have many advantages. **Securities** are formal, legal documents that set out the rights and obligations of the buyers and sellers. Securities tend to have standard features, which facilitates their trading. Furthermore, there are many types of securities, enabling both investors (buyers) and users (sellers) of capital to meet their particular needs.

FINANCIAL INSTRUMENTS

Much of this text deals with the characteristics of different financial instruments – primarily stocks, bonds, and mutual funds. The brief discussion included here introduces you to the different types of financial instruments discussed throughout this text.

Financial instruments are divided into broad classes: debt instruments, equity instruments, investment funds, derivatives and other financial instruments.

Debt Instruments	Debt instruments formalize a relationship in which the issuer promises to repay the loan at maturity and in the interim makes interest payments to the investor. The term of the loan ranges from very short to very long, depending on the type of instrument. Bonds, debentures, mortgages, treasury bills and commercial paper are all examples of debt instruments (also referred to as **fixed-income securities**).
Equity Instruments	**Equities** are usually referred to as stocks or shares because the investor actually buys a "share" of the company, thus gaining an ownership stake in the company. As an owner, the investor participates in the corporation's fortunes. If the company does well, the value of the company may increase, giving the investor a capital gain when the shares are sold. In addition, the company may distribute part of its profit to shareowners in the form of dividends. Unlike interest on a debt instrument, however, dividends are not obligatory. Different types of shares have different characteristics and confer different rights on the owners. In general, there are two main types of stock: common and preferred.

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Investment Funds	An **investment fund** is a company or trust that manages investments for its clients. The most common form is the **open-end fund**, also known as a **mutual fund**. The fund raises capital by selling shares or units to investors, and then invests that capital. As unitholders, the investors receive part of the money made from the fund's investments.
Derivatives	Unlike stocks and bonds, **derivatives** are suited mainly for more sophisticated investors. Derivatives are products based on or derived from an underlying instrument, such as a stock or an index. The most common derivatives are options and forwards.
Other Financial Instruments	In the past few years, investment dealers have used the concept of financial engineering to create structured products that have various combinations of characteristics of debt, equity and investment funds. Two of the most popular are linked notes and exchange-traded funds (ETFs).

WHAT ARE THE FINANCIAL MARKETS?

Securities are a key element in the efficient transfer of capital from savers to users, benefiting both. Many of the benefits of investment products, however, depend on the existence of efficient markets in which these securities can be bought and sold. A well-organized market provides speedy transactions and low transaction costs, along with a high degree of liquidity and effective regulation.

Like a farmers' market, a **financial market** (or securities market) provides a forum in which buyers and sellers meet. But there are important differences. In the securities markets, buyers and sellers do not meet face to face. Instead, intermediaries, such as investment advisors (IAs) or bond dealers, act on their clients' behalf.

Unlike most markets, a securities market may not manifest itself in a physical location. This is possible because securities are intangible – at best, pieces of paper, and often not even that. Of course, some securities markets do have a physical component. Other securities markets, such as the bond market, exist in "cyberspace" as a computer- and telephone-based network of dealers who may never see their counterparts' faces. In Canada, all exchanges are electronic.

The capital market or securities market is made up of many individual markets. For example, there are stock markets, bond markets and money markets. In addition, securities are sold on primary and secondary markets.

- In the **primary market** new securities are sold by companies and governments to investors for the first time. Companies can raise capital by selling stocks or bonds to investors while governments raise capital by selling bonds. In this market, investors purchase securities directly from the issuing company or government. When a company issues stocks for the very first time in the primary market, the sale is known as an **initial public offering** (IPO). Mutual funds are also sold in the primary market. Investors buy and sell Mutual fund units directly from and to the fund itself.

- In the **secondary market** investors trade securities that have already been issued by companies and governments. In this market, buyers and sellers trade among each other at a price that is mutually beneficial to both parties. The security is then transferred from the seller to the buyer. The issuing company does not receive any of the proceeds from transactions in the secondary market - the issuer received payment when the securities were first issued in the primary market.

AUCTION MARKETS IN CANADA

Markets can also be divided into auction and dealer markets. In an **auction market**, buyers enter bids and sellers enter offers for a stock. The price at which a stock is traded represents the highest price the buyer is willing to pay

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(the **bid price**) and the lowest price the seller is willing to accept (the **ask price**). These orders are then channelled to a single central market and compete against each other.

CANADIAN EXCHANGES

A **stock exchange** is a marketplace where buyers and sellers of securities meet to trade with each other and where prices are established according to the laws of supply and demand. On Canadian exchanges, trading is carried on in common and preferred shares, rights and warrants, listed options and futures contracts, instalment receipts, exchange-traded funds (ETFs), income trusts, and a few convertible debentures.

Liquidity is fundamental to the operation of an exchange. A liquid market is characterized by:

- Frequent sales
- Narrow price spread between bid and ask prices
- Small price fluctuations from sale to sale

Canada's stock exchanges are auction markets. During trading hours, Canada's exchanges receive thousands of buy and sell orders from all parts of the country and abroad.

Exchanges in Canada include: the Toronto Stock Exchange (TSX) and the TSX Venture Exchange, the TSX Alpha Exchange, and the Montreal Exchange (MX, also known as the Bourse de Montréal) owned by the TMX Group Inc. Other exchanges in Canada include ICE NGX Canada, the Canadian Securities Exchange (CSE) and Cboe Canada. Each exchange is responsible for the trading of certain products.

- The TSX lists senior equities, some debt instruments that are convertible into a listed equity, income trusts and Exchange-Traded Funds (ETFs).
- The TSX Venture Exchange trades junior securities and a few debenture issues.
- The TSX Alpha Exchange lists equities, debentures, exchange-traded funds and structured products. Alpha Exchange offers trading in securities listed on the Toronto Stock Exchange and the TSX Venture Exchange.
- The Montreal Exchange trades all financial and equity futures and options.
- ICE NGX provides electronic trading, central counterparty clearing and data services to the North American natural gas and electricity markets.
- CSE trades securities of emerging companies.
- Cboe Canada is an exchange that provides listing services and facilitates trading in public companies, exchange-traded funds, Canadian Depositary Receipts™, special purpose acquisition companies, and closed-end funds. Approximately 15% of all volume traded in Canadian-listed securities trade through Cboe Canada.

More information about global stock exchanges can be found on the World Federation of Exchanges website.

DEALER MARKETS

Dealer markets are the second major type of market on which securities trade. They consist of a network of dealers who trade with each other, usually over the telephone or over a computer network. Unlike auction markets, where the individual buyer's and seller's orders are entered, a dealer market is a negotiated market where only the dealers' bid and ask quotations are entered by those dealers.

Almost all bonds and debentures are sold through dealer markets. These dealer markets are less visible than the auction markets for equities, so many people are surprised to learn that the volume of trading (in dollars) on the dealer market for debt securities is significantly larger than the equity market.

Dealer markets are also referred to as **over-the-counter** (OTC) or as unlisted markets – securities on these markets are not listed on an organized exchange as they are on auction markets.

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AUCTION AND DEALER MARKETS

What is the difference between an auction market and a dealer market? *Complete the online learning activity to assess your knowledge.*

WHO ARE THE DIFFERENT FINANCIAL INTERMEDIARIES?

The term "**financial intermediary**" is used to describe any organization that facilitates the trading or movement of the financial instruments that transfer capital between suppliers and users. Intermediaries include banks and trust companies, which concentrate on gathering funds from suppliers in the form of saving deposits and transferring them to users in the form of mortgages, car loans and other lending instruments. Other intermediaries, such as insurance companies and pension funds, collect funds and invest them in bonds, equities, real estate, etc., to meet their customers' needs for financial security.

In an efficient and well-ordered economy, suppliers and users of capital must be able to meet. It does little good to have surplus funds to invest if there is no mechanism for finding someone who needs those funds. In other words, you must have access to a market. Whether an individual, a company, or government is a supplier or user of capital, market access is organized through other companies known as financial intermediaries.

Intermediaries can be divided into two broad categories: the deposit-taking and non-deposit-taking institutions.

- The deposit-taking institutions are the banks and trust companies. They pool the deposits of thousands of savers and then invest those funds in different types of investments. Banks, for example, will lend money to users of funds, such as individuals, companies, and governments. They will also invest some funds in money market securities.
- A life insurance company is an example of a non-deposit-taking institution. It acquires capital by pooling the premiums from policies it issues to individuals and then investing those premiums in capital market securities. In this way, it provides sufficient funds to satisfy the claims of policy holders.

THE ROLE OF INVESTMENT DEALERS

Another example of a non-deposit-taking institution is an investment dealer. Investment dealers serve a number of functions, sometimes acting on their clients' behalf as agents in the transfer of instruments between different investors, at other times acting as principal. Investment dealers are sometimes known by other names, such as brokerage firms or securities houses. Investment dealers play a significant role in the securities industry's two main functions.

- First, investment dealers help to transfer capital from savers to users through the **underwriting** and distribution of new securities. This takes place in the primary market.
- Second, investment dealers maintain secondary markets in which previously issued or outstanding securities can be traded among investors. The secondary market enables investors who originally bought the investment products to sell them and obtain cash. As noted previously, without secondary market liquidity – the ability to sell the securities with ease at a reasonable price – investors would not buy securities in the primary market.

OTHER INTERMEDIARIES

Investors' confidence in Canada's financial systems is high. It is based upon a long record of integrity and financial soundness reinforced by a legislative framework that provides close supervision of their basic activities.

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CHARTERED BANKS

Chartered banks operate under the *Bank Act*, which has been regularly updated, usually through revisions every five years. The *Act* sets out specifically what a bank may do and provides operating rules enabling it to function within the regulatory framework.

According to the Office of the Superintendent of Financial Institutions, at the end of February 2024, Canada had 80 banks, made up of 35 domestic banks, 15 foreign bank subsidiaries and 30 foreign bank branches. The largest six domestic banks control more than 90% of banking industry assets. The Canadian banking industry is one of Canada's largest industries in terms of employment. As a result of international consolidation, the largest Canadian banks are becoming relatively smaller when judged against their international competitors. However, in February 2024, the Royal Bank of Canada, the Toronto-Dominion Bank, Scotiabank, the Bank of Montreal, and the Canadian Imperial Bank of Commerce were all in the list of top 50 banks worldwide when ranked by total assets.

LIFE INSURANCE COMPANIES

The insurance industry has two main businesses: life insurance and property and casualty insurance. Life insurance and related products include insurance against loss of life, livelihood, or health, such as health and disability insurance, term and whole life insurance, pension plans, registered retirement savings plans and annuities.

The Canadian insurance industry, including agents, appraisers, and adjusters, employs more than 150,000 people, divided more or less evenly between the life insurance industry and the property and casualty insurance industry.

CREDIT UNIONS AND CAISSES POPULAIRES

Early in the 1900s, many individual savers and borrowers felt that chartered banks were too profit oriented. This led to the establishment of many co-operative, member-owned credit unions in English-speaking communities in Canada (predominantly in Ontario, Saskatchewan, and British Columbia), and the parallel caisses populaires in Quebec. Frequently, credit unions seek member-savers from common interest groups such as those in the same neighbourhood, those with similar ethnic backgrounds and those from the same business or social group.

Credit unions and caisses populaires offer diverse services such as business and consumer deposit taking and lending, mortgages, mutual funds, insurance, trust services, investment dealer services, and debit and credit cards. Local credit unions and caisses populaires belong to central provincial societies to further common interests. These societies provide broader services such as investing surplus funds from member locals, lending them funds when required, and cheque clearing. Many are as small as one branch.

INVESTMENT FUNDS

An investment fund (or mutual fund) is a vehicle operated by an investment company that pools contributions from investors and invests these proceeds into a variety of securities, including stocks, bonds, and money market instruments.

Individuals who contribute money become share or unitholders in the fund and share in the income, gains, losses and expenses the fund incurs in proportion to the number of units or shares that they own. Professional money managers manage the assets of the fund by investing the proceeds according to the fund's policies and objectives and based on a particular investing style.

Mutual fund shares/units are redeemable on demand at the fund's current price, which depends on the market value of the fund's portfolio of securities at that time.

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Case Study | Helping Clients Understand Mutual Funds (*for information purposes only*)

Mary is meeting with a young client to set up their first investment account. The client's goal is to save for retirement. Mary recommends using a Registered Retirement Savings Plan or RRSP (covered in more detail in Chapter 6 of the textbook). Mary explains to her client that an RRSP is a savings plan registered with the Canada Revenue agency, contributions to the plan are tax deductible, and tax on any income or gains within the plan are deferred until money is withdrawn from the plan. Investing in RRSPs will help to maximize the client's long-term investment growth potential through tax-deferred compounding.

After establishing the client's "know your client" (KYC) information, Mary suggests using mutual funds within an RRSP to help the client save and grow their investments. The client has no idea what a mutual fund is. Mary explains that:

- It is an investment pool into which investors combine their contributions.
- With those contributions, investors purchase units of the pool – once they do, they become unit holders in the pool or fund.
- The mutual fund's investment manager then takes those investor contributions and purchases assets, such as equities or bonds.
- The fund's investment manager does this based on the fund's mandate. This mandate guides and directs the investment manager as to how to invest the pool of investors' contributions – for example, a fund with a mandate to invest in Canadian government short-term bonds will use unit holders' contributions to purchase federal and provincial government bonds with maturities between one and three years.
- If the value of the assets in the pool rises beyond the costs associated with running the fund and any fees the fund charges unit holders, investor's units rise in value; if the assets held by the fund fall in value, then the unit holder's units decline in value.
- Investors can buy more or sell some or all of their units at any time.
- Mutual funds can be purchased and sold within an RRSP.

WHAT IS THE CANADIAN SECURITIES REGULATORY FRAMEWORK?

Regulation of the financial system and financial transactions is a complex matter in Canada, involving both federal and provincial regulators, as well as a **self-regulatory organization** (SRO). At the federal level, there are several pieces of legislation — such as the *Consumer Protection Act*, the *Criminal Code*, the *Bank Act*, and the *Canada Business Corporations Act* — that define the limits of activity for participants in the financial system. In general, however, most legislation regarding the trading and distribution of securities is a provincial matter, dealt with in each province's securities act and is the responsibility of each province's securities administrator. Collectively, the provincial regulators work together to harmonize and coordinate the regulation of the Canadian capital markets through the Canadian Securities Administrators (CSA).

SELF-REGULATORY ORGANIZATION (SRO)

A self-regulatory organization is a private industry organization that has been granted the privilege of regulating its own members by the provincial regulatory bodies. An SRO is responsible for enforcement of its members' conformity with securities legislation and has the power to prescribe its own rules of conduct and financial requirements for its members.

Self-regulatory organization is delegated regulatory functions by the provincial regulatory bodies, and SRO by-laws and rules are designed to uphold the principles of securities legislation. The provincial securities commissions monitor the conduct of the SROs. They also review the rules of the SROs in the province to ensure that they do not

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conflict with securities legislation and are in the public's interest. SRO regulations apply in addition to provincial regulations. If an SRO rule differs from a provincial rule, the more stringent rule of the two applies.

The SRO regulating the Canadian investment industry is the **Canadian Investment Regulatory Organization** (CIRO). CIRO is described in the section below.

CANADIAN INVESTMENT REGULATORY ORGANIZATION

Canadian Investment Regulatory Organization CIRO is the SRO that oversees the trading activity of all investment dealers and mutual fund dealers.

CIRO carries out its regulatory responsibilities through setting and enforcing rules regarding the proficiency, business, and financial conduct of investment and mutual fund dealers and their registered employees and through setting and enforcing market integrity rules regarding trading activity on Canadian marketplaces.

In Quebec, the mutual fund industry is under the responsibility of the **Autorité des marches financiers** (AMF) and the **Chambre de la sécurité financière**. The AMF is responsible for overseeing the operation of fund companies within the province, and the Chambre is responsible for setting and monitoring continuing education requirements and for enforcing a code of ethics.

In October 2023, the government of Quebec and AMF announced their approval of a delegation of powers to CIRO, which represents a further step in the harmonization of the regulatory framework across Canada.

The AMF is covered in more detail in Chapter 17.

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SUMMARY

1. Define investment capital and describe the role played by suppliers and users of capital in the economy.
   - Investment capital is available and investable wealth (e.g., real estate, stocks, bonds, and money) that is used to enhance the economic growth prospects of an economy.
   - In direct investment, an individual or company invests directly in an item (e.g., house, new plant, or new road); indirect investment occurs when an individual buys a security and the issuer invests the proceeds.
   - Capital has three characteristics: it is mobile, it is sensitive, and it is scarce.
   - The only source of capital is savings. Capital comes from retail, institutional, and foreign investors. Users of capital are individuals, businesses and governments. These can be both Canadian and foreign users.
2. Describe and differentiate among the types of financial instruments used in financial market transactions.
   - Debt (bonds or debentures): the issuer promises to repay a loan at maturity, and in the interim makes payments of interest or interest and principal at predetermined times.
   - Equity (stocks): the investor buys a share that represents a stake in the company.
   - Investment funds (mutual funds): a company or trust that manages investments for its clients.
   - Derivatives (options, futures, rights): products derived from an underlying instrument such as a stock, other financial instrument, commodity, or index.
   - Other financial instruments (linked-notes, ETFs): these relatively new products have been financially engineered and have various combinations of characteristics of debt, equity and investment funds.
3. Describe the roles and distinguish among the different types of financial markets and define primary and secondary markets.
   - The financial markets facilitate the transfer of capital between investors and users through the exchange of securities.
   - The exchanges do not deal in physical movement of securities; they are simply the venue for agreeing to transfer ownership.
   - The primary market is the initial sale of securities to an investor. Mutual funds are bought and sold in the primary market.
   - The secondary market is the transfer of already issued securities among investors.
   - In an auction market, clients' bid and ask quotations for a stock are channelled to a single central market (stock exchange) and compete against each other.
   - Dealer markets are a network of dealers that trade directly between each other. Most bonds and debentures trade on these markets.
4. Describe the roles of the financial intermediaries in the Canadian financial services industry.
   - A financial intermediary is an organization that facilitates the movement of capital between suppliers and users.
   - Financial intermediaries can be divided into two broad categories: the deposit-taking and non-deposit-taking institutions.
   - The deposit-taking institutions are the banks and trust companies.
   - The non-deposit-taking institutions can be life insurance companies and investment dealers, among others.

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5. List the industry regulators and their main functions and requirements affecting mutual fund sales representatives.
   - Most of the legislation regarding the trading and distribution of securities is a provincial matter, dealt with in each province's securities act and is the responsibility of each province's securities administrator.
   - Regulation of the financial system and financial transactions in Canada involves both federal and provincial regulators. Collectively, the provincial regulators work together to harmonize and coordinate the regulation of the Canadian capital markets through the Canadian Securities Administrators (CSA).
   - A Self-Regulatory Organization (SRO) is a private industry organization that has been granted the privilege of regulating their own members by the provincial regulatory bodies.
   - The Canadian Investment Regulatory Organization (CIRO) is the self-regulatory organization that oversees investment dealers and mutual fund dealers in Canada. CIRO does not regulate the mutual funds themselves. That responsibility remains with the securities commissions.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 2 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 2 FAQs.

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Overview of Economics 3

CONTENT AREAS

- What Is Economics?
- How Is Economic Growth Measured?
- What Are the Phases of the Business Cycle?
- What Are the Key Labour Market Indicators?
- What Role Do Interest Rates Play?
- What Is the Nature of Money and Inflation?
- How Do Fiscal and Monetary Policies and International Economics Impact the Economy?

LEARNING OBJECTIVES

1 | Define microeconomics and the tools used to understand how prices are determined, and describe the process for achieving market equilibrium.

2 | Define gross domestic product and explain how it is calculated.

3 | Describe the phases of the business cycle, and distinguish among the economic indicators used to analyze business conditions.

4 | Define unemployment and the various categories of unemployment.

5 | Describe the determinants of interest rates, define inflation and discuss the costs of inflation.

6 | Discuss monetary policy and fiscal policy, including the balance of payment accounts, and list the tools used by governments to implement these policies.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

balance of payments
Bank Rate
basis point
business cycle
capital and financial account
cash management
coincident indicators
Consumer Price Index
contractionary
cost-push inflation
current account
cyclical unemployment
deflation
demand
demand-pull inflation
discouraged workers
disinflation
economic indicators
equilibrium price
expansionary
final good
fiscal policy
frictional unemployment
gross domestic product
inflation rate
interest rates
labour force
lagging indicators
leading indicators
macroeconomics
market
microeconomics
monetary aggregates
monetary policy
natural unemployment rate
nominal GDP
nominal interest rate
open-market operations
output gap
overnight rate
participation rate
Payments Canada
Phillips curve
potential GDP
real GDP
real interest rate
sacrifice ratio
seasonal unemployment
soft landing
structural unemployment
supply
unemployment rate

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INTRODUCTION

Economic news and events are announced daily. There are monetary policy reports from the Bank of Canada, quarterly gross domestic product estimates, regular changes in the Canadian exchange rate relative to the U.S. dollar, and data on monthly unemployment and housing starts to consider. For an investor or advisor, being able to recognize the impact these events could have on markets and individual investments helps make wise investment decisions.

Economics is fundamentally about understanding the choices individuals make and how the sum of those choices affects our market economy. Whether it is the purchase of groceries, a home, or stocks and bonds, the interaction between consumer choices and the economy takes place in an organized market and at a price determined by demand and supply for goods and services by consumers, investors and governments.

An example of an organized market is the Toronto Stock Exchange. Investors come together to buy and sell securities anonymously. Millions of transactions are carried out each day, and this anonymous interaction creates a market and an equilibrium price for a variety of securities. The buyer and seller of a security clearly have different views about the security (generally, the buyer believes it will go up in value and the seller believes it will go down), and it is likely that some type of economic analysis went into the decision to buy or sell.

In this chapter on economics, we start with some of the building blocks, such as economic growth, interest rates, the labour markets, the causes of inflation and the fiscal and monetary policies. These principles are important because they are the basis of your understanding of how economics and the economy tie into the process of making an investment decision.

WHAT IS ECONOMICS?

Economics is a social science concerned with an understanding of production, distribution, and consumption of goods and services. More specifically, the focus of economics is on how consumers, businesses, and governments make choices when allocating resources to satisfy their needs. The sum of those choices determines what happens in the economy.

Most of us would like to have more of what we have, or at least be able to buy or consume as much as we can. In reality, this is not possible because our spending habits are constrained by the amount of income we earn and by the fact that there is a limit to what an economy can produce during a given period. Because scarcity prevents us from having as much as we would like of certain goods, the performance of the economy hinges on the collective decisions made by millions of individuals. Ultimately, the interaction between these market participants determines what we pay for a good or service, or a stock or mutual fund, for example.

MICROECONOMICS AND MACROECONOMICS

Economics is divided into two main topic areas: microeconomics and macroeconomics.

Microeconomics analyzes the market behaviour of individual consumers and firms, how prices are determined, and how prices determine the production, distribution, and use of goods and services. For example, consumers decide how much of various goods to purchase, workers decide what jobs to take, and firms decide how many workers to hire and how much output to produce.

Microeconomics looks to answer such questions as:

- How do minimum wage laws affect the supply of labour and company profit margins?
- How would a tax on softwood lumber imports affect the growth prospects in the forestry industry?
- If a government placed a tax on the purchase of mutual funds, will consumers stop buying them?

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Macroeconomics focuses on the performance of the economy as a whole. It looks at the broader picture and to the challenges facing society as a result of the limited amounts of natural resources, human effort and skills, and technology. Whereas microeconomics looks at how the individual is impacted by changes in prices or income levels, macroeconomics focuses on such important issues as unemployment, inflation, recessions, government spending and taxation, poverty and inequality, budget deficits and national debts.

Macroeconomics looks to answer such questions as:

- Why did total output shrink last quarter?
- Why have the number of jobs fallen in the last year?
- Will a decrease in interest rates stimulate economic growth?
- How can a nation improve its standard of living?

THE DECISION MAKERS

There are three main groups that interact in the economy: consumers, firms and governments.

Consumers	Consumers set out to maximize their satisfaction or well-being within the limitations of their available resources – income from employment, investments or other sources.
Firms	Firms set out to maximize profits by selling their goods or services to consumers, governments or other firms.
Governments	Governments spend money on education, health care, employment training and the military. They oversee regulatory agencies, and they take part in public works projects, including highways, hydro-electric plants and airports.

THE MARKET

The activity between consumers, firms and governments takes place in the various markets that have developed to make trade possible. A **market** is any arrangement that allows buyers and sellers to conduct business with one another. For example, the fixed-income market is a network of investment professionals, distribution channels, suppliers and wholesalers who develop and trade products to meet various investor needs. These decision makers do not meet physically, but they are connected and make their deals by a variety of electronic means. Ultimately, this organized marketplace allows participants access to a product that investors want to buy or sell.

DEMAND AND SUPPLY

The price of a product is probably one of the most important factors that determines how much of that product individuals will buy or sell in the marketplace. Everything has a price, and financial products and services are not exempt; stocks, bonds, commodities, currency all have visible prices that allow individuals to make investment decisions. The price paid for any product is largely determined by the demand for and supply of that product in the marketplace.

Two general economic principles help to explain the interaction between **demand** and **supply**:

- The quantity demanded of a good or service is the total amount consumers are willing to buy at a particular price during a given time period. According to the Law of Demand, the higher the price the lower the quantity demanded, while the lower the price the higher the quantity demanded, other factors held constant.
- The quantity supplied of a good or service is the total amount that producers are willing to supply at a particular price during a given time period. According to the Law of Supply, the higher the price of a good, the greater the quantity supplied.

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MARKET EQUILIBRIUM

The interaction that takes place between buyers and sellers in the market ultimately determines an equilibrium price for that product – basically, this is the price that matches what someone is willing to pay for the product with the price at which someone is willing to supply it.

For example, we can find the market equilibrium of a fictitious laptop market using the information from Table 3.1.

Table 3.1 | Market for Laptops

Price	Quantity Demanded (*units*)	Quantity Supplied (*units*)
$1,000	500	0
$1,500	350	100
$2,000	200	200
$2,500	150	300
$3,000	10	450

Figure 3.1 shows the market for laptops.

Figure 3.1 | Shows the Market for Laptops

Table 3.1 lists the quantities demanded and the quantities supplied at each price level. The one price that ensures a balance between the quantity demanded and the quantity supplied is $2,000. This intersection yields an **equilibrium price** of $2,000 and an equilibrium supply of 200 units.

Demand and supply forces are instrumental in regulating the price of financial instruments. Consider these scenarios:

The housing market in Asia is growing rapidly resulting in an increased demand for Canadian forestry products. The demand for Canadian dollars will rise because manufacturers in Asia will need to purchase products from Canada with Canadian dollars. The increased demand would result in an increase in the price of the Canadian dollar—this assumes the supply of money does not change.

In another example, if a corporation reports poor financial performance, investors who own stock in the company may decide to sell their common shares. The increased supply of the company's common shares in the marketplace would result in a decrease in the price of the shares.

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HOW IS ECONOMIC GROWTH MEASURED?

There are different ways of valuing a nation's total production of goods and services – i.e., its output. Economic growth is an economy's ability to produce greater levels of output over time and is expressed as the percentage change in a nation's **gross domestic product** (GDP) over a given period. By measuring growth, we can better gauge the performance and overall health of the entire economy.

MEASURING GROSS DOMESTIC PRODUCT

Gross domestic product is the market value of all final goods and services produced within a country in a given time period, usually a year or a quarter. The quarterly reports are used to keep track of the short-term activity within the market, while the annual reports are used to examine trends and changes in production and the standard of living.

Goods and services go through many stages of production before they end up in the hands of their final users. The calculation of GDP looks at the total amount of final goods produced over the period. A **final good** is a finished product, one that is purchased by the ultimate end user.

EXAMPLE

A computer is a final good, but the chip inside it is not since the chip was used to manufacture the computer. If the market value of all the chips were added together with the market value of all the computers, GDP would be overstated. Only the market value of the computer, a final good, is included in GDP.

THE EXPENDITURE APPROACH, INCOME APPROACH, AND PRODUCTION APPROACH

There are three ways of measuring GDP: the expenditure approach, the income approach, and the production approach.

Table 3.2 | Expenditure Approach, Income Approach, and Production Approach Versus Income Approach

Expenditure approach	The expenditure approach to calculating GDP adds up everything that consumers, businesses, and governments spend money on during a certain period. This approach measures GDP as the sum of four components: 1. Personal consumption (C) 2. Investment (I) 3. Government spending on goods and services (G) 4. Net exports (exports less imports) of goods and services (X – M) The GDP using this approach is measured as follows: GDP = C + I + G + (X – M)
Income approach	The income approach starts from the idea that total spending on goods and services should equal the total income generated by producing all of those goods and services. The GDP using the income approach is the sum of all income generated by this economic activity.

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Table 3.2 | Expenditure Approach, Income Approach, and Production Approach Versus Income Approach

Production approach	The production approach, also known as the value-added approach, calculates an industry or sector's output and subtracts the value of all goods and services used to produce the outputs. For example, if the computer industry produced a total of $5 billion in computers and spent $2 billion on goods and services to produce the computers, the value added to GDP by the computer industry would be $3 billion. Adding up the value-added contributions of the various economic sectors produces a country's total GDP for the measurement period.

These three measures of GDP show that all production results in income earned by workers, firms or investors, and all production is eventually consumed (or stored as inventory). Thus, GDP is obtained by adding up either all income earned in the economy, all spending in the economy, or all value-added production.

In theory, GDP measured by the three different approaches should be the same.

REAL AND NOMINAL GDP

Producing more goods and services represents an improvement in a nation's standard of living. However, if the increase in GDP was simply the result of higher prices, then the cost of buying those goods and services has increased, which reflects an increase in our cost of living but not an improvement in living standards.

Nominal GDP is the dollar value of all goods and services produced in a given year at prices that prevailed in that same year and is typically the amount reported in the financial press. Changes in nominal GDP from year to year reflect both changes in the prices of goods and services and changes in the amount of output produced in a year.

Real GDP, or constant dollar GDP, is the dollar value of all goods and services produced in a given year valued at prices that prevailed in some base year. Holding prices constant to this base year establishes a better measure of the change in GDP that is the result of changes in the amount of output produced during the year.

A doubling of GDP during the year tells us nothing about what is happening to the rate of real production unless we also know how prices or inflation also changed over the year. Therefore, differences between real and nominal GDP are entirely the result of changes in prices. Real GDP tells us what would have happened to spending on goods and services if quantities had changed but prices had not changed.

EXAMPLE

Assume the financial press reports that nominal GDP grew by 4.4% last year and prices rose by 1.1%. Is this a good outcome for the economy?

In nominal terms, the economy grew by 4.4%, which is a good amount of economic growth. However, when we adjust by 1.1% for the effect of rising prices, real economic growth was actually 3.3% (4.4% – 1.1%). The nation was more productive this year than last, but not as much as the nominal GDP might lead you to believe.

However, what if the financial press reported that nominal GDP grew by 2.4% last year, whereas prices rose by 3.1%? Is this bad news for the economy?

In nominal terms, the economy grew by 2.4%, but if we adjust by 3.1% for inflation, we see that the economy actually shrank by approximately 0.7% (2.4% – 3.1%). Real GDP growth therefore was negative, which means that the nation was less productive last year than the year before.

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PRODUCTIVITY AND DETERMINANTS OF ECONOMIC GROWTH

Since the industrial revolution, the GDP of industrialized economies has tended to grow over time.

Growth in GDP results from a variety of factors; among the more important are:

- Increases in population over time. Even if the output of every worker remained constant, GDP would rise due to the growing workforce.
- Increases in the capital stock. As more workers are provided with additional equipment and as their skills have been improved with better training and education, individual productivity rises.
- Improvements in technology. Technological innovation helps firms and workers to recombine existing resources of land, capital and labour in new and increasingly productive ways. Generally, this has involved the substitution of capital (i.e., improved machinery) for labour in the production of goods and services. A recent example is the continuing replacement of bank tellers by ATM machines.

Gains in individual prosperity are ultimately related to increases in productivity. If productivity growth exceeds increases in the unit costs of production, firms are able to lower the prices of the goods and services they sell.

Sustained growth compounds remarkably over time. A policy measure that increases annual growth from 2% to 3% doubles a nation's standard of living over a 30- to 40-year period.

The analysis of long-term trends in GDP growth rates is important, as it allows for the identification of countries with higher expected growth rates. If the analysis is correct, investment in these countries can lead to superior investment returns.

THE DETERMINANTS OF ECONOMIC GROWTH

Increases in output per worker, or productivity, must originate from either an increase in capital per worker or improvements in the technology that combine labour and capital to produce output. The liquidity to support investment – i.e., additions to the capital stock – is generated from savings.

Current research on the determinants of economic growth (which are reflected in higher investment values) suggests the following conclusions:

- Capital accumulation alone cannot sustain growth. Eventually, increased capital leads to smaller and smaller gains in output. So, a higher savings rate is not responsible for a sustained higher growth rate over long periods of time. Nonetheless, a higher savings rate can ultimately support a higher level of output per individual.
- Sustained growth requires technological progress which is associated with a complex pattern of basic research, applied research and product development situated in a supportive entrepreneurial context.

ECONOMICS OVERVIEW

How well do you understand GDP, measuring growth, phases of the business cycle, and labour market factors? *Complete the online learning activity to assess your knowledge.*

WHAT ARE THE PHASES OF THE BUSINESS CYCLE?

Economic fluctuations present a recurring problem for policy makers as downturns in economic growth are directly related to rising unemployment. Such fluctuations in output and employment are called the **business cycle**, and directly affect the value of investments over time.

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PHASES OF THE BUSINESS CYCLE

Growth in the economy is measured by the increase in real GDP. Even though the term *cycle* suggests that the business cycle is regular and predictable, this is not really the case. In reality, fluctuations in real output are both irregular and unpredictable, and this makes each business cycle unique. Nonetheless, the following sequence of events is relatively typical over the course of a business cycle.

EXPANSION

In times of normal growth, the economy is steadily expanding. An expansion is characterized by the following activities:

- Inflation is stable.
- Businesses have adjusted inventories to meet higher demand and are investing in new capacity to meet increased demand and to avoid shortages.
- Corporate profits are rising.
- New business start-ups outnumber bankruptcies, and stock market activity is strong.
- Job creation is steady, and the unemployment rate is steady or falling.

Overall, real GDP is rising during an expansion.

PEAK

The top of the cycle is called a peak. A peak is characterized by the following activities:

- Demand begins to outstrip the capacity of the economy to supply it.
- Labour and product shortages cause wage increases and inflation to rise.
- Interest rates rise, and bond prices fall. This begins to dampen business investment and reduce sales of houses and big-ticket consumer goods.
- Business sales decline, resulting in accumulation of unwanted inventory and reduced profits.
- Stock prices fall and stock market activity declines.

CONTRACTION

When an economy passes its peak, it enters a downturn, or contraction. If the contraction lasts at least two consecutive quarters, then the economy is considered to be in recession. A contraction is characterized by the following activities:

- The level of economic activity begins to decline, meaning that real GDP decreases.
- Businesses faced with unwanted inventories and declining profits reduce production, postpone investment, curtail hiring and may lay off employees.
- Business failures outnumber start-ups.
- Falling employment erodes household income and confidence.
- Consumers react by spending less and saving more, which further cuts into sales, fuelling the contraction.

If other countries are also experiencing a contraction – especially the United States – the magnitude and duration of the contraction in Canada is significantly increased by the reduction in the sale of goods to those outside Canada; in short, by the reduction in our exports. In turn, the rate of default and the probability of default by corporate borrowers increase, which is reflected in a higher default premium on corporate borrowings.

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TROUGH

As the contraction continues, falling demand and excess capacity curtail the ability of businesses to raise prices and of workers to demand higher salaries. The growth cycle reaches its lowest point and is characterized by the following activities:

- Interest rates fall, triggering a bond rally.
- Inflation falls.
- Consumers who postponed purchases during the contraction are spurred by lower interest rates and begin to spend.
- Stock prices rally.

RECOVERY

During the recovery, GDP returns to its previous peak. The recovery typically begins with renewed buying of interest rate–sensitive items like houses and cars.

A recovery is characterized by the following activities:

- Businesses that reduced inventories during the contraction must increase production to meet the new demand.
- They are typically still too cautious to hire back significant numbers of workers, but the period of widespread layoffs is over.
- Businesses are not yet ready to make significant new investment.
- Unemployment remains high; wage pressures are restrained, and inflation may decline further.

When the economy rises above its previous peak, at point A in Figure 3.2, another expansion has begun.

Figure 3.2 | The Business Cycle

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Case Study | Seeing the Business Cycle at a Micro Level: Joe's Hardware Store (*for information purposes only*)

Financial advisor Paul is meeting with his client, Joe, a local hardware store owner who wants to adjust his non-registered investment portfolio from income-focused to growth-focused.

Joe has been in the hardware business for over 20 years, managing to grow his small business into a success. Joe's business was very profitable through most of the 2000s. The economy was strong, and his customers were spending on fixing up their existing homes to sell or just to better enjoy them. New customers were coming in to buy products to customize and improve their newly purchased homes.

However, in 2008, as the financial crisis hit and recession set in, Joe noticed a substantial downturn in his customer traffic and revenue. Joe began to cut his prices to attract business, hurting his profitability in the process. As job losses mounted and the local real estate market declined, people began to cut back on their spending, deferring home improvements and purchases until they felt more financially secure. This forced Joe to cut back on his inventory purchases; eventually, he was forced to lay off two of his five staff. Needing more income, he asked Paul to adjust his non-registered portfolio of mutual funds to income-producing from balanced growth.

In 2010, Joe noticed that sales were rising again, as more people were finding work and real estate prices began to rise. With interest rates low to spur economic growth, Joe eventually felt confident enough to borrow to increase his inventory. After a year, with his revenue rising, he felt confident enough to raise his prices back to pre-recession levels. With his profit margins restored, Joe was able to hire back his two former employees.

With his business income back to a satisfactory level, Joe no longer needs to draw income from his investment portfolio. After a full investment review, Paul adjusts Joe's mutual fund holdings back to balanced growth. Joe adds additional savings to his portfolio, anticipating that as the economy strengthens, so will corporate profits and stock prices.

USING ECONOMIC INDICATORS

Economic indicators are statistics or data series that are used to analyze business conditions and current economic activity. They can help to show whether the economy is expanding or contracting. For example, if certain key indicators suggest that the economy is going to do better in the future than had previously been expected, investors may decide to change their investment strategy.

Economic indicators are classified as leading, coincident or lagging.

LEADING INDICATORS

Leading indicators tend to peak and trough before the overall economy in anticipation of emerging trends in economic activity. They are the most useful and widely used of the economic indicators because they anticipate change by indicating what businesses and consumers have begun to produce and spend.

Leading indicators include the following:

- Housing starts.
- Manufacturers' new orders, which indicate expectations of higher levels of consumer purchases of such items as automobiles and appliances.
- Commodity prices, which reflect rising or falling demand for raw materials.
- Average hours worked per week, which rise or fall depending on the level of output and therefore anticipate changes in employment.
- Stock prices, which suggest changing levels of profits.
- The money supply, which indicates available liquidity and thus has an impact on interest rates.

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COINCIDENT INDICATORS

Coincident indicators are those which change at approximately the same time and in the same direction as the whole economy, thereby providing information about the current state of the economy.

Coincident indicators include the following:

- Personal income
- GDP
- Industrial production
- Retail sales

EXAMPLE

Personal income is a good example because if it is rising, economic growth will typically follow.

LAGGING INDICATORS

Lagging indicators are those that change after the economy as a whole change. These indicators are important because they can confirm that a business cycle pattern is occurring.

Lagging indicators include the following:

- Unemployment
- Private sector plant and equipment spending
- Business loans and interest on such borrowing
- Labour costs
- The inflation rate

EXAMPLE

Unemployment is one of the more popular lagging indicators because a rising unemployment rate is an indication that the economy is doing poorly or that companies are anticipating a downturn in the economy.

IDENTIFYING RECESSIONS

A popular definition of a recession is at least two consecutive quarters of declining real GDP. However, Statistics Canada and the U.S. National Bureau of Economic Research describe a recession differently.

Statistics Canada judges a recession by the depth, duration and diffusion of the decline in business activity. Here is some of the criteria they look at:

- The decline must be of substantial depth, since marginal declines in output may be merely statistical error.
- The duration must be more than a couple of months, since bad weather alone can cause a temporary decline in output.
- The decline must be a feature of the whole economy. While a strike in a major industry can cause GDP to decline, that does not constitute a recession.
- The behaviour of employment and per capita income may also be taken into account.

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In recent years, the term **soft landing** has been used to describe a business cycle phase when economic growth slows sharply but does not turn negative, while inflation falls or remains low. Soft landings are considered the "Holy Grail" of policy makers, who want sustained growth without the cost of recurring recessions.

Exhibit 3.1 | Recent Periods of Economic Slowdown and Recession in Canada

DATES	DURATION
* April 2001 to September 2001	5 months
July 2008 to July 2009	12 months
March 2020 to August 2020	6 months

In March 2020, Canada's real GDP fell by more than 7% as a result of the worldwide pandemic. Canada's GDP finished 2020 5.4% lower than the previous year. In the first quarter of 2021, Canada's real GDP growth rate was 1.38%. Canadian GDP has grown significantly since the second quarter of 2020.

* Technically, this was a growth slowdown or downturn, not a recession.
Source: Adapted from Statistics Canada, www.statcan.gc.ca.

WHAT ARE THE KEY LABOUR MARKET INDICATORS?

For most Canadians, the performance of the economy affects them most personally in the labour market. When the economy is strong, so is the demand for labour. Employment rises, the unemployment rate falls, and workers win bigger wage raises and/or non-wage benefits. Conversely, when the economy weakens, so does the demand for labour, and wage demands are restrained.

Statistics Canada divides the population into two groups: the working-age population (those individuals aged 15 years and older) and those too young to work. Statistics Canada also defines the **labour force** as the sum of the working-age population who are either employed or unemployed.

LABOUR MARKET INDICATORS

There are two key indicators that describe the labour market: the participation rate and the unemployment rate.

- The **participation rate** represents the share of the working-age population that is in the labour force. For Canada, the current participation rate is 65.4% (*Source: Statistics Canada Labour Force Survey*). The participation rate is an important indicator because it shows the willingness of people to enter the workforce and take jobs.
- The **unemployment rate** represents the share of the labour force that is unemployed and actively looking for work. The unemployment rate may rise either because the number of employed fell or the number of people entering the work force looking for work rose, or both. The unemployment rate in Canada was 5.8% in December 2023.

The participation rate in Canada has followed a mostly upward trend over the last 50 years, rising from 54% in the early 1960s to its current level of 65.4%.

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CANADIAN UNEMPLOYMENT RATE

Figure 3.3 shows the patterns in the Canadian unemployment rate since the 1960s. In general, the upward trend with large fluctuations corresponds to the trend and stages of the business cycle.

- Significant post-war peaks in unemployment were recorded during the last two major recessions in Canada.
- The peak at 11.9% corresponds to the recession of 1980–1983, while the peak of 11.4% corresponds to the recession of 1991.
- Typically, the impact of economic downturns varies across workers, with young and unskilled workers the most vulnerable.
- The recession of 1990–91 was somewhat different as the unemployment rate among prime-age workers jumped higher than usual.
- The sudden unemployment rate increase to 13.7% in early 2020 was a result of the worldwide pandemic. Unemployment finished the year at 8.8%. In December 2023, the unemployment rate has fallen to 5.8%.

Figure 3.3 | Unemployment Rate in Canada (%) 1976 – 2023

Source: Bloomberg

Some people are unemployed for a short time, while others are unemployed for longer periods. The average duration of unemployment varies over the business cycle and is typically shorter during an expansion and longer during a recession. At times, job prospects are so poor that some of the unemployed simply drop out of the labour force and become discouraged workers. **Discouraged workers** are those individuals who are available and willing to work but cannot find jobs and have not made efforts to find a job within the previous month. They are therefore not included as part of the labour force. The disappearance of discouraged workers from the labour force can produce an artificially low unemployment rate.

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TYPES OF UNEMPLOYMENT

There are four general types of unemployment: cyclical, seasonal, frictional and structural.

Type	Description
Cyclical unemployment	**Cyclical unemployment** is tied directly to fluctuations in the business cycle. It rises when the economy weakens and firms lay off workers in response to lower sales. It drops when the economy strengthens again.
Seasonal unemployment	**Seasonal unemployment** occurs in industries that operate only during part of the year. For example, farmhands are hired to pick fruits and vegetables only during the months of June to October. In the winter months, seasonal unemployment is a regular occurrence in such industries.
Frictional unemployment	**Frictional unemployment** is the result of normal labour turnover resulting from people entering and leaving the workforce and from the ongoing creation and destruction of jobs. Even in the best of economic times, people are looking for work because they have finished school, quit, been laid off, or been fired from their most recent job. This is a normal part of a healthy economy.
Structural unemployment	**Structural unemployment** occurs when workers are unable to find work or fill available jobs because they lack the necessary skills, do not live where jobs are available, or decide not to work at the wage rate offered by the market. This type of unemployment is closely tied to changes in technology, international competition and government policy. Structural unemployment typically lasts longer than frictional unemployment because workers must retrain or possibly relocate to find a job.

The distinction between frictional and structural unemployment is sometimes difficult to determine. There are always job openings and potential workers to fill those jobs. With frictional unemployment, unemployed workers have the required skill levels to fill a job vacancy. With structural unemployment, however, unemployed workers looking for work do not possess the needed skills to find a job.

The existence of frictional and structural factors in the economy prevents unemployment from falling to zero. This means that even in times of healthy economic growth, there is a level below which unemployment will not drop without causing other negative economic effects.

This minimal level of unemployment is called the **natural unemployment rate**. At this level of unemployment, the economy is thought to be operating at close to its full potential or capacity such that all resources, including labour, are fully employed. Further employment growth is achieved either through increased wages to attract people into the labour force which fuels inflation, or by more fundamental changes to the labour market that removes impediments to job creation.

The Bank of Canada pays close attention to the actual unemployment rate and the natural unemployment rate as the gap between the two has an important influence on wage inflation.

- When the actual unemployment rate is above the natural rate, an excess supply of workers in the market weakens labour bargaining power, which discourages wage gains and helps to keep inflation in check.
- When the actual unemployment rate is below the natural rate, a shortage of workers contributes to an increase in wage gains and higher inflation.

Thus, the natural unemployment rate is often viewed as the level of unemployment that is consistent with stable inflation, which is why it is an important number with respect to monetary and fiscal policy decisions.

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WHAT ROLE DO INTEREST RATES PLAY?

Interest rates are an important link between current and future economic activity. For consumers, interest rates represent the gain from deferring consumption from today to tomorrow via saving. For businesses, interest rates represent one component of the cost of capital – i.e., the cost of borrowing money. Thus, the rate of growth of the capital stock, which determines future output, is related to the current level of interest rates.

Interest rates are one of the most important financial variables affecting securities markets. Since they are essentially the price of credit, changes in interest rates reflect, and affect, the demand and supply for credit and debt, and this has direct implications for the bond and money markets. Changes in interest rates made by the Bank of Canada also signal changes in the direction of monetary policy, and this has broader implications for the entire economy.

DETERMINANTS OF INTEREST RATES

A broad range of factors influences interest rates:

Demand and supply of capital	A large government deficit or a boom in business investment raises the demand for capital and forces up the price of credit (interest rates), unless there is an equivalent increase in the supply of capital. In turn, the higher interest rate may encourage people to save more. An increase in the savings of government, businesses or consumers may reduce their demand for borrowing. This, in turn, may reduce interest rates.
Default risk	The greater the risk that borrowers may default on money they have borrowed, the higher the interest rate demanded by lenders. If the central government is at risk of defaulting on its debt, interest rates rise for everybody. This additional interest rate is referred to as a default premium.
Foreign interest rates and the exchange rate	Since Canada has an open economy and investors are free to move their money between Canada and other countries, foreign interest rates and financial conditions influence Canadian interest rates. ***Example:*** A rise in interest rates in the U.S. increases investors' returns on money invested there. Investors holding Canadian dollars and who would like to invest in the U.S. will need to sell their Canadian dollars to purchase U.S. dollar-denominated securities. This increases the supply of Canadian dollars on the foreign exchange market and places downward pressure on the value of the Canadian dollar. If the Bank of Canada would like to slow or reduce the fall in the value of the Canadian dollar, they can intervene and raise short-term interest rates, even if underlying conditions in Canada are unchanged. This will encourage investors to continue holding Canadian investments rather than switch to U.S. dollar-denominated securities.
Central bank credibility	The central bank exercises its influence on the economy by raising and lowering short-term interest rates. One of its main responsibilities is to keep inflation low and stable. The more credible and long-established a commitment to low inflation has been, the lower interest rates will be to compensate for the risk of rising inflation.
Inflation	The higher the expected inflation rate, the higher the interest rate that must be charged by lenders to compensate for the erosion of the purchasing power of money over the duration of the loan.

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HOW INTEREST RATES AFFECT THE ECONOMY

Higher interest rates affect the economy in the following ways:

- They may raise the cost of capital for business investments. An investment should earn a greater return than the cost of the funds used to make the investment. Higher interest rates reduce the possibility of profitable investments. In turn, this reduces business investment.
- By increasing the cost of borrowing, higher interest rates discourage consumers from spending, especially to buy houses and major durable goods like cars and furniture on credit. This encourages consumers to save more.
- By increasing the portion of household income needed to service debt, such as mortgage payments, they reduce the income available to be spent on other items. This effect may be offset somewhat by the higher interest income earned by savers.

Thus, higher interest rates have a negative effect on growth prospects. The effect of lower interest rates is the opposite in each case and can provide a positive environment for economic growth.

EXPECTATIONS AND INTEREST RATES

Investment decisions are forward-looking. Any decision to purchase a security is based on an expectation about the future return from the security. Increased optimism in the market can generate a rise in stock prices. Consumer pessimism can stall economic growth and decrease share prices. Moreover, government economic policies may work only through their impact on people's expectations. For example, the Bank of Canada makes considerable effort to maintain the credibility of its commitment to low inflation.

The role of inflation expectations is particularly important in determining the level of nominal interest rates. The **nominal interest rate** is one where the effects of inflation have not been removed – for example, the rate charged by a bank on a loan, or the quoted rate on an investment such as a Guaranteed Investment Certificate or Treasury bill. Other things equal, the higher the rate of inflation, the higher nominal interest rates will be. In contrast, the **real interest rate** is the nominal interest rate minus the expected **inflation rate**.

NEGATIVE INTEREST RATES

A negative interest rate occurs when the interest rate charged on borrowed funds is less than zero. In a negative interest rate environment, banks may charge their customers for keeping deposits in their account, or they may pay a customer to take a loan. The latter seems almost too good to be true, given that, under negative interest rates, the borrower does not have to make any interim interest payments over the term of the loan. They make periodic payments related to principal amortization only and are required to repay only a discounted amount of the total original loan at maturity.

A negative interest rate is an unusual scenario, most likely to occur when monetary policy has already moved interest rates to zero or near zero, but further economic stimulus is required. When a central bank pushes interest rates into negative territory, thereby charging commercial banks to store their deposits with the central bank, the commercial banks have an incentive to lend more money, which, in turn, may stimulate economic growth.

NEGATIVE INTEREST RATES IN THE U.S. AND CANADA

Prior to 2020, negative interest rates prevailed mostly in some EU countries and in Japan. The U.S. appeared immune to negative interest rates up until aggressive monetary and fiscal policy programs were launched in response to the potential debilitating effects of the COVID-19 pandemic on the U.S. economy in general and on U.S. unemployment levels in particular.

However, on March 25, 2020, history was made in the U.S. when both the one- and three-month U.S. Treasury bills traded at negative yields for the first time.

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Negative interest rates in the U.S. have not appeared again since May 2020. In Canada, none of the Bank of Canada's administered rates had reached negative territory. Due to various fundamental factors, Canadian interest rates are normally higher than their U.S. equivalents. This difference provides a buffer if (or when) negative interest rates appear in Canada. Of course, there is always the risk that U.S. government bond market yields could move into negative territory again. Depending on the size and extent of this move, Canada could also end up with negative interest rates, which would start with Treasury bills and possibly extend to short- and mid-term government bonds.

WHAT IS THE NATURE OF MONEY AND INFLATION?

Money is the essential ingredient that makes the economy function.

Inflation occurs when prices are rising. This is problematic because as prices rise money begins to lose its value—that is, more and more money is needed to buy the same amount of goods and services, and this has a negative effect on living standards. Inflation is an important economic indicator for securities markets because it is the rate at which the real value of an investment is eroded.

THE NATURE OF MONEY

Money can be any object that is accepted as payment for goods and services, and that can be used to settle debts.

- Its function as a medium of exchange is essential. Without money, goods and services would need to be exchanged with other goods and services in some form of barter system.
- Money also acts as a unit of account so that we know exactly the price of a good or service.
- Finally, money represents a store of value since it does not have an expiration date if a consumer decides to save it for a later use. The more stable the value of money, the better it can act as a store of value.

The amount of money in circulation can be measured in a variety of ways. Some of these different measures, known as **monetary aggregates**, are one way of monitoring economic activity. The Bank of Canada looks primarily at changes in the growth rate of the various monetary aggregates it tracks when conducting monetary policy because these aggregates provide information about changes that are occurring in the economy. By monitoring these aggregates, the Bank strives to keep the rate of money growth consistent with low inflation and long-term growth.

INFLATION

Inflation in an economy-wide sense is a generalized, sustained trend of rising prices:

- A one-time jump in prices caused by an increase in the price of oil or the introduction of a new sales tax is not true inflation unless it feeds into wages and other costs and initiates a wage-price spiral.
- Likewise, a rise in the price of one product is not, in itself, a result of inflation; it may just be a relative price change reflecting the increased scarcity of that product.

Inflation is ultimately about money growth. It is a reflection of "too much money chasing too few products."

MEASURING INFLATION

The **Consumer Price Index** (CPI) is one of the most widely used indicators of inflation and is considered a measure of the cost of living in Canada. Statistics Canada tracks the retail price of a shopping basket comprised of 600 different goods and services, each weighted to reflect typical consumer spending. In this way, the CPI represents a measure of the average of the prices paid for this basket of goods and services.

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Statistics Canada has a difficult task creating a basket of goods and services that is representative of the typical Canadian household. They try to make the relative importance of the items included in the CPI basket the same as that of an average Canadian household. However, it is almost impossible to construct a "basket of goods" that would be representative of all consumers. For example, the spending patterns of a family with young children would not be the same as the spending patterns of a retired couple.

When calculating CPI, prices are measured against a base year, which at the moment is 2002 in Canada, and this base year is given a value of 100. The total CPI was 158.3 at the end of December 2023, which indicates that the basket of goods costs 58.3% more than it did in 2002.

The inflation rate is calculated by comparing the current period CPI with a previous period:

$$\text{Inflation Rate} = \frac{CPI_{\text{Current Period}} - CPI_{\text{Previous Period}}}{CPI_{\text{Previous Period}}} \times 100$$

The CPI was 158.3 in December 2023 and 153.1 in December 2022. The inflation rate over the 12-month period was 3.4%:

$$\text{Inflation Rate} = \frac{158.3 - 153.1}{153.1} \times 100$$

$$= 0.033964$$

$$= 3.4\%$$

The Inflation Rate in Canada

Inflation has not been much of a problem over the last decade. In recent history, Canada's inflation rate reached a high of 12.2% in 1981 and fell as low as –0.9% in July 2009. The inflation rate declined dramatically in both the early 1980s and 1990s based on monetary policy actions taken by the Bank of Canada.

Figure 3.4 shows the inflation rate in Canada since 1965.

Figure 3.4 | The Inflation Rate in Canada 1965 – 2023

Source: Bloomberg

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THE COSTS OF INFLATION

Inflation imposes many costs on the economy:

- It erodes the standard of living of those on a fixed income and those who lack wage bargaining power. It rewards those able to increase their income either through increased wages or changes to their investment strategy, in response to inflation.
- Inflation reduces the real value of investments such as fixed-rate loans, since the loans are paid back in dollars that buy less. This can be good for the borrower if his or her income rises with inflation. But, more likely, inflation results in lenders demanding a higher interest rate on the money they lend.
- Inflation distorts the signal prices send to participants in market economies, where prices are critical for balancing supply with demand. Rising prices draw resources into areas of scarcity, and falling prices move funds away from glutted areas. When inflation is high, it is difficult to determine if a price increase is simply inflationary, or a genuine relative price change.
- Accelerating inflation usually brings about rising interest rates and a recession. Thus, high-inflation economies usually experience more severe booms and busts than low-inflation economies.

THE CAUSES OF INFLATION

The relationships among the growth rate of money, inflation and the rate of unemployment are a subject of considerable controversy.

An important determinant of inflation is the balance between supply and demand conditions in the economy. Economists use an indicator called the **output gap** to measure inflation pressures in the economy by looking at the difference between real GDP (what the economy actually produces) and **potential GDP** (what the economy is capable of producing when its existing inputs of labour, capital, and technology are fully employed at their normal levels of use).

Think of potential output as the maximum level of real GDP that the economy can maintain without inflation increasing.

- A negative output gap occurs when actual output is below potential output. In this case, economists would say there is spare capacity in the economy – the economy can produce more output because its resources are not being used to their full capacity. Unemployed workers and unused plant and equipment resources can be called into service without impacting wages or prices. Thus, inflation will fall or remain steady.
- A positive output gap occurs when actual output is above potential output. In this case, economists would say the economy is operating above capacity – the economy is trying to produce more than it can with existing resources. Scarce labour fuels wage increases, and other strains on productive resources place upward pressure on inflation.

  In general, a positive output gap occurs as the economy moves through an expansion toward the peak. Output continues to expand, consumer income is rising, and this leads to strong consumer demand for goods and services. However, this creates a situation whereby if companies can continue to operate well above normal capacity, they can raise prices in response to this strong demand. In this way, higher and continued consumer demand pushes inflation higher. This state of affairs is called **demand-pull inflation**.
- Inflation can also rise or fall due to shocks from the supply side of the economy – when the cost of producing output changes. At a given price level, when faced with higher costs of production from higher wages or increases in the price of raw materials, firms respond by raising prices and producing a smaller amount of their product. In this way, the higher costs push inflation higher. This is an example of **cost-push inflation**.

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DISINFLATION

Just as there are costs associated with rising inflation, a falling rate of inflation can also have a negative impact on the economy. **Disinflation** is a decline in the rate at which prices rise – i.e., a decrease in the rate of inflation. Prices are still rising, but at a slower rate.

The potential cost of disinflation is captured by the **Phillips curve**, which says that when unemployment is low, inflation tends to be high, and when unemployment is high, inflation tends to be low. According to this theory:

- Lower unemployment is achieved in the short run by increasing inflation at a faster rate.
- Lower inflation is achieved at the cost of possibly increased unemployment and slower economic growth.

To gauge the cost of disinflation, the **sacrifice ratio** is used to describe the extent to which GDP must be reduced with increased unemployment to achieve a 1% decrease in the inflation rate.

Disinflation in Canada

Experts suggest that the sacrifice ratio is as high as 4; that is, 4% of output must be sacrificed to bring down inflation 1%. So, there may be a considerable cost in lost output in pursuing the goal of lower inflation. This cost could involve a significant period of relatively high unemployment.

DEFLATION

Deflation is a sustained fall in prices where the annual change in the CPI is negative year after year. In fact, deflation is just the opposite of inflation. Falling prices are generally preferred over rising prices. Goods and services become cheaper, and our income seems to go a little farther than it used to. Although true in the short term, there are negative consequences of deflation.

One view holds that the impact of sustained falling prices eventually leads to a decline in corporate profits. As prices continue to fall, businesses must sell their products at lower and lower prices. Businesses cut back on production costs and wage rates, and if conditions worsen, lay off workers. For the economy as a whole, unemployment rises, economic growth slows, and consumers shift their focus from spending to saving. Ultimately, declining company profits will negatively impact stock prices.

As the economy slows and enters a recession, the central bank can use lower short-term interest rates to stimulate consumer and business spending.

EXAMPLE

In 2007, the Bank Rate in Canada was as high as 4.75% (the Bank Rate is the rate of interest that the Bank of Canada charges on very short-term loans to financial institutions and is used as a signal of monetary policy actions). During the 2008-2009 recession, the Bank Rate fell to as low as 0.50% and remained there for more than a year to help stabilize the economy. For Canada, the recession was not as deep as expected and low interest rates played a key role in stimulating the Canadian economy.

The Bank of Canada, in response to the worldwide pandemic, once again dropped the Bank Rate to 0.50% in March 2020. It remained at 0.50% for more than a year. As of February 2024, it had climbed to 5.0%.

INTEREST RATES AND INFLATION

How do interest rates and inflation affect the economy? *Complete the online learning activity to assess your knowledge.*

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HOW DO FISCAL AND MONETARY POLICIES AND INTERNATIONAL ECONOMICS IMPACT THE ECONOMY?

MONETARY POLICY

Monetary policy refers to regulation of the money supply and available credit for the purpose of promoting sustained economic growth and price stability.

The goal of monetary policy is to maintain the value of our currency and our economic health.

Canada's central bank, the Bank of Canada, uses its influence over short-term interest rates to control changes in the money supply and available credit. (External economic developments also have an impact on monetary policy objectives.)

The duties and role of the Bank are stated in a general way in the preamble of the *Bank of Canada Act*:

- "To regulate credit and currency in the best interests of the economic life of the nation...
- To control and protect the external value of the national monetary unit...
- To mitigate by its influence fluctuations in the general level of production, trade, prices and employment, as far as may be possible within the scope of monetary action and generally...
- To promote the economic and financial welfare of the Dominion."

The Act does not specify the manner in which the Bank should pursue these objectives but it (and other legislation) grants powers to the Bank which are designed to enable it to fulfill its role.

While the Bank administers policy independently without day-to-day government intervention, the thrust of policy is the ultimate responsibility of the elected government.

Monetary policy can be either **expansionary** or **contractionary**, as defined below.

An expansionary monetary policy increases the amount of money and credit available in the economy.

EXAMPLE

If the Bank of Canada lowers the Bank Rate or buys bonds in the market, borrowing will become cheaper, and spending will be more attractive to consumers. As a result, more loans will be made, and less money will be tied up in investments. These activities will increase the money supply.

A contractionary monetary policy decreases the amount of money and credit available in the economy.

EXAMPLE

If the Bank of Canada increases the Bank Rate or sells bonds in the market, borrowing will become more expensive, and saving will be more attractive to consumers. As a result, fewer loans will be made, and more money will be tied up in investments. These activities will decrease the money supply.

Both expansionary and contractionary policies are implemented with the help of the **Bank Rate** and **cash management** techniques, as defined below.

BANK RATE

The Bank of Canada carries out monetary policy primarily through changes to what it calls the target for the **overnight rate**. The overnight rate is the interest rate set in the overnight market – a marketplace where major Canadian financial institutions lend each other money on an overnight basis. When the Bank changes the target for the overnight rate, other short-term interest rates also usually change.

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Currently, this band is 50 **basis points** (or one-half of a percentage point) wide. Each day, the Bank targets the mid-point of the operating band as its key monetary policy objective. For example, if the operating band is 1% to 1.5%, then the target for the overnight rate is 1.25%.

The target is an important policy tool as it tells financial institutions the average interest rate that the Bank wants to see in the overnight market. Changes in the operating band for overnight rates are very important events. They may signal a policy shift toward an easing or tightening of monetary conditions in order to meet the Bank's inflation-control targets.

The Bank Rate is the minimum rate at which the Bank of Canada will lend money on a short-term basis to the chartered banks and other members of **Payments Canada** in its role as lender of last resort. It is closely related to the target for the overnight because the Bank Rate is the upper limit of the operating band. Continuing with our example from above, with an operating target range of between 1% and 1.5%, the Bank Rate is 1.5%.

EXAMPLE

If the Bank of Canada decreases the Bank Rate, nominal interest rates will also fall. As a result, the money supply will increase (expansionary policy).

If the Bank of Canada increases the Bank Rate, nominal interest rates will also rise. As a result, the money supply will decrease (contractionary policy).

CASH MANAGEMENT

In cash management, or **open-market operations**, a central bank controls its national money supply through the buying or selling of bonds in the market.

EXAMPLE

If the Bank of Canada buys bonds in the market, the price of the bonds will rise, causing interest rates to fall. As a result, the money supply will increase (expansionary policy).

If the Bank of Canada sells bonds in the market, the price of bonds will fall, causing interest rates to increase. As a result, the money supply will decrease (contractionary policy).

The trend of the Bank Rate affects both users and suppliers of credit. For example, a rising trend signals a desire on the part of the Bank of Canada to reduce the demand for credit by raising the cost of credit. Administered rates (those rates determined by each financial institution), such as prime rates, usually follow the trend of the Bank Rate.

DRAWDOWNS AND REDEPOSITS

Drawdowns and redeposits represent a third strategy in defining monetary policy. The federal government maintains accounts with the Bank of Canada and the chartered banks. By transferring funds to or from the Bank of Canada and to or from its accounts at the chartered banks, the federal government can influence short-term interest rates.

A drawdown refers to a transfer of deposits to the Bank of Canada from the chartered banks.

EXAMPLE

A drawdown drains the supply of available cash balances from the banking system. This transfer of funds decreases deposits and reserves available to the banks. The result is a contraction in loans to consumers and businesses and an upward pressure on interest rates.

A redeposit refers to a transfer of funds from the Bank of Canada to the chartered banks.

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EXAMPLE

A redeposit increases deposits and reserves and the availability of funds in the banking system. This transfer of funds places downward pressure on interest rates and gives banks an incentive to increase loans to consumers and businesses.

FISCAL POLICY

Fiscal policy is a deliberate action by the government (federal, provincial or territorial) to influence the economy through changes either in spending or in taxation initiatives.

Similar to monetary policy, fiscal policy can be either expansionary or contractionary. These categories of fiscal policy are described below.

EXPANSIONARY POLICY

If the government believes that current economic growth is lower than a specific target level, it may attempt to stimulate the economy. The government may implement an expansionary fiscal policy, which will either increase spending or decrease taxes.

EXAMPLE

If the government believes the unemployment rate is too high, it might cut business taxes to encourage businesses to hire more workers.

CONTRACTIONARY POLICY

If the government believes that current economic growth is rising too quickly, it may attempt to cool off the economy. The government may implement a contractionary fiscal policy, which will either decrease spending or increase taxes.

EXAMPLE

If the government believes that public spending is too high, it might cut public programs, such as health care spending, even though such cuts may increase unemployment.

HOW FISCAL POLICY AFFECTS THE ECONOMY

Fiscal policy affects the economy in several ways:

- Spending: Governments can purchase goods or services themselves, such as a new highway, thereby boosting economic activity. Or they can simply transfer money to citizens to spend or save themselves, such as with social security cheques. Only the first type is recorded as government spending in GDP.
- Taxes: The amount of tax collected may vary because the size of the tax base changed, i.e., the number of people or companies paying the tax expanded or contracted. Also, it can vary because the tax rate changed, so that each dollar of economic activity yields more or less tax. Raising tax rates reduces the disposable income of consumers, thereby dampening their spending. The main types of taxes are as follows:
  - Direct taxes levied on the income of individuals and companies
  - Sales taxes, including value-added taxes, such as the goods and services tax, and excise taxes, such as on liquor
  - Payroll taxes levied as a share of wages
  - Capital taxes levied on the size of a company's assets or capital
  - Property taxes levied on residential and commercial property

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By using a mixture of monetary policies and fiscal policies, governments are better able to control economic phenomena.

INTERNATIONAL ECONOMICS

International economics deals with the interactions Canada has with the rest of the world – trade, investments and capital flows, and the exchange rate. Since the end of the Second World War, the dependence of industrial economies on trade has risen significantly. This is especially so for Canada – exports of goods and services are approximately 30% of GDP, compared to 20% in the 1960s. As a result, the economic performance of our trading partners is an important determinant of Canadian economic growth.

THE BALANCE OF PAYMENTS

The **balance of payments** is a detailed statement of a country's economic transactions with the rest of the world for a given period, typically over a quarter or a year. The two components of the balance of payments are the current account and the capital and financial account.

- The **current account** records the exchanges of goods and services between Canadians and foreigners, the earnings from investment income, and net transfers such as for foreign aid.
- The **capital and financial account** records financial flows between Canadians and foreigners related to investments by foreigners in Canada and investments by Canadians abroad.

Balance of payments transactions can be thought of as incurring either a demand or supply of foreign currency and a corresponding supply or demand of Canadian currency. Current account outflows, such as to buy foreign goods or pay interest on debt held by foreigners, create a demand for foreign currency to make those payments. Canadian dollars are offered in exchange for this foreign currency unless there is a corresponding demand for Canadian dollars.

Think of the current account as what we spend on things and the capital and financial account as what we use to finance this spending.

- During a given year, if Canada buys more goods and services from abroad than it sells, it will run a current account deficit for the year. It will need to sell more assets to finance the spending, which means running a capital and financial account surplus, or go into debt.
- As an analogy, when an individual spends more than he/she earns, the difference is made up by either borrowing money or selling something of value and using the proceeds to pay off the debt. In this way, a country experiencing a current account surplus is saving more than it is spending and can lend out this surplus amount to foreigners.

THE CURRENT ACCOUNT

The most important component of the current account is merchandise trade – the goods and services we produce and sell abroad and those we import from other countries.

A number of factors influence the performance of Canada's trade. The most important is the relative pace of demand in foreign and Canadian economies. Strong growth in U.S. demand for automobiles, raw materials and other products made in Canada boosts exports. Likewise, strong demand in Canada for foreign products boosts imports.

The competitive position of Canadian firms in foreign markets and foreign firms in Canada also influences trade. A falling Canadian dollar, for example, lowers the price of Canadian exports in foreign markets and raises the price of imports in Canada. This boosts exports and depresses imports. Those benefits are lost, however, if the price of Canada's goods rises in response to the lower dollar. A rising Canadian dollar has the opposite effect.

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THE CAPITAL AND FINANCIAL ACCOUNT

The key difference between current and capital and financial account transactions is that the latter result in an acquisition of an asset and the right to any income it earns. Thus, the purchase of a computer made in Canada is a current account transaction, whereas the purchase of the company that made the computer is a capital and financial account transaction.

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SUMMARY

After reading this chapter, you should be able to:

1. Define microeconomics and the tools used to understand how prices are determined, and describe the process for achieving market equilibrium.
   - Economics is fundamentally about understanding the choices individuals make and how the sum of those choices affects our economy. Whether it is the purchase of groceries, a home or stocks and bonds, this interaction ultimately takes place within organized markets.
   - The three main decision makers in the economy are consumers, companies and governments. While consumers set out to maximize their well-being and firms aim to maximize profits, governments set out to maximize the public good.
   - The forces of demand and supply and the interaction between buying and selling decisions by consumers ultimately leads to market equilibrium, and this is the price at which we buy and sell goods and services.
2. Define gross domestic product and explain how it is calculated.
   - Economic growth is an economy's ability to produce greater levels of output over time and is expressed as the percentage change in a nation's GDP. GDP is the market value of all finished goods and services produced within a country in a given time period, usually a year or a quarter.
   - There are three ways to measure GDP. The expenditure approach measures GDP as the sum of personal consumption, investment, government spending, and net exports of goods and services. The income approach measures GDP as the total income earned producing those goods and services. The production approach calculates output and subtracts the value of all goods and services used to produce the output.
3. Growth in GDP is tied to increases in population over time, increases in the capital stock, and improvements in technology. Describe the phases of the business cycle, and distinguish among the economic indicators used to analyze business conditions.
   - There are five phases to a typical business cycle: recovery, expansion, peak, contraction and trough.
   - Various leading, lagging and coincident economic indicators are used to analyze business conditions and current economic activity. They are useful to show whether the economy is expanding or contracting. For example, the combination of higher new housing starts, new orders for durable goods, and an increase in furniture and appliance sales suggests an economy that is moving from recovery to expansion.
   - Improvements in long-term economic growth are attributed to improvements in productivity. Productivity growth has major implications for the overall wealth of an economy, as there is a direct relationship between the amount of output generated per worker and the standard of living of a typical family.
4. Define unemployment and the various categories of unemployment.
   - The participation rate represents the share of the working-age population that is in the labour force. The unemployment rate represents the share of the labour force that is unemployed and actively looking for work.
   - Cyclical unemployment is the result of fluctuations in the business cycle. Frictional unemployment is the result of normal labour turnover, for example, from people entering and leaving the workforce and from the ongoing creation and destruction of jobs. Structural unemployment occurs when workers are unable to find work or fill available jobs because they lack the necessary skills, do not live where jobs are available, or decide not to work at the wage rate offered by the market. Seasonal unemployment results from industries that only operate during part of the year.

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5. Describe the determinants of interest rates, define inflation and discuss the cost of inflation.
   - A broad range of factors influences interest rates: demand for and supply of capital, default risk, central bank operations, foreign interest rates and inflation.
   - Higher interest rates raise the cost of capital for consumers and businesses. This discourages consumers from spending and borrowing money to purchase, for example, homes, cars, and other big-ticket items. Businesses forgo taking part in expansion projects or other forms of investment. Thus, higher rates lead to slower economic growth.
   - In contrast, lower interest rates have an expansionary effect on the economy.
   - Negative interest rates occur when the interest rate charged on borrowed funds is less than zero.
   - Inflation is a generalized, sustained trend of rising prices measured on an economy-wide basis. A one-time jump in prices caused by an increase in the price of a good or service is not inflation unless it ultimately leads to higher wages and other costs felt throughout the economy.
   - The CPI is considered a measure of the cost of living in Canada. The CPI can be used to measure the inflation rate.
   - Inflation erodes the standard of living for those on a fixed income, it reduces the real value of investments because the loans are paid back in dollars that buy less, and it distorts the signal that prices send to participants in the market. Rising inflation typically brings about rising interest rates and slower economic growth.
   - Disinflation is a decline in the rate at which prices rise, meaning a decrease in the rate of inflation. The Phillips curve can be used to gauge the potential costs of disinflation.
   - Deflation is a sustained fall in prices where the annual change in the CPI is negative year after year. Although falling prices are generally good for the economy, a sustained fall in prices can have negative implications for corporate profits and the economy.
6. Discuss monetary policy and fiscal policy, including the balance of payment accounts, and list the tools used by governments to implement these policies.
   - Monetary policy refers to regulation of the money supply and available credit for the purpose of promoting sustained economic growth and price stability.
   - Fiscal policy is a deliberate action by the government (federal, provincial or territorial) to influence the economy through changes either in spending or in taxation initiatives.
   - The balance of payments is a detailed statement of a country's economic transaction with the rest of the world.
   - The current account records the exchange of goods and services between Canadians and foreigners, the earnings from investment income, and net transfers.
   - The capital and financial account records financial flows between Canadians and foreigners, related investments by foreigners in Canada, and investments by Canadians abroad.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 3 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 3 FAQs.

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SECTION 2

THE KNOW YOUR CLIENT COMMUNICATION PROCESS

4 Getting to Know the Client

5 Behavioural Finance

6 Tax and Retirement Planning

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SECTION 2 | THE KNOW YOUR CLIENT COMMUNICATION PROCESS

In Section 1, we introduced you to the role of the mutual fund sales representative. This role requires that representatives know their clients and products well enough so that recommendations can be made based on client preferences, wants, and needs.

In Section 2, our job is to help you understand how to "know your client." This part of the client service equation is as important as understanding the mutual funds the client may wish to buy.

In Chapter 4, we explain what specific information must be obtained from each client before you are in a position to make investment recommendations based on suitability. Suitability means making recommendations once all information about a client and a security is analyzed to determine if an investment is suitable for the client's account. The chapter ends with a classification of clients based on the Life-Cycle Hypothesis.

In Chapter 5, we introduce behavioural finance, which is the use of psychology to understand human behaviour in finance or investing. As a mutual fund sales representative, you must be aware that clients may be making decisions based on irrational or emotional biases and how this may affect your relationship with your clients.

In Chapter 6, we provide an overview of the tax and retirement planning options that clients have available to them. Since accumulating wealth for retirement is a primary goal for most clients, it is important for the mutual fund sales representative to acquire knowledge about the various programs and vehicles available to save for retirement.

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Getting to Know the Client 4

CONTENT AREAS

- **Why Are Client Communication and Planning Important?**
- **What Is the Financial Planning Approach?**
- **What Are the Steps in the Financial Planning Process?**
- **What Is the Life-Cycle Hypothesis?**

LEARNING OBJECTIVES

1 | Describe the client communication and planning process.

2 | Summarize the six steps of the planning process and describe how to apply them to client scenarios.

3 | Describe and differentiate between the five stages of the life-cycle hypothesis.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

asset allocation

capital gains

capital growth

cash flow

current income

discretionary funds

discretionary income

financial circumstances

financial goals and objectives

financial planning pyramid

household budget

investment horizon

investment knowledge

life insurance

life-cycle hypothesis

net worth

personal data

record keeping

safety of capital

savings

suitability

total assets

total liabilities

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INTRODUCTION

One of your obligations as a mutual fund sales representative is to recommend only suitable investment products, ensuring that any solicited or unsolicited purchases are reasonable. To do this, you need complete knowledge of the products you offer and you must have a complete understanding of your client's goals and investment constraints. Without these two elements, the guidance you provide will be incomplete and may result in a dissatisfied client.

This chapter is devoted to knowing the client, learning what information to obtain and how to go about getting that information. To start, the chapter provides an overview of your responsibilities as a mutual fund sales representative presented within a financial planning framework. This framework gives you a structure and process for understanding your clients well enough to formulate suitable investment recommendations.

WHY ARE CLIENT COMMUNICATION AND PLANNING IMPORTANT?

A mutual fund sales representative evaluates investment suitability usually on the basis of a client's predetermined financial goals and objectives. Your job is to determine which mutual funds provide an acceptable fit. For this you need excellent communication and planning skills. You undertake financial planning as a process to better understand how clients can attain their financial objectives. This planning is a continuous process because plans must be revised to reflect changes in the financial and personal circumstances of the client and in the economy.

Assessing whether a client's financial goals are reasonable requires that you understand how they are set. Thus, you must look at the client from a financial planner's perspective even though you will not be helping the client to set goals. You must know whether the goals are consistent with the client information you obtain. The goals also must be consistent with what you know about the long- and short-term performance of mutual funds and other securities.

EXAMPLE

A client who requires earnings of 30% a year on a mutual fund investment in order to achieve a retirement goal will likely find that goal is unattainable. A 30% return is unrealistic, especially with the volatility markets have experienced over the last ten years.

WHAT IS THE FINANCIAL PLANNING APPROACH?

The financial planning approach means assessing clients' current financial and personal situation, constraints, goals and objectives and making recommendations through a financial plan to achieve these goals and objectives. The planner may call on specialists in investment management, taxes, estate planning, and financial planning and integrate the expert analysis, findings, and recommendations into a coherent plan to meet the client's needs. In fact, many large financial institutions have created internal teams of these specialists to support their advisors and representatives.

Financial planning involves analysis of clients' age, wealth, career, marital status, taxation status, estate considerations, risk profile, investment objectives, legal concerns, and other matters. Accordingly, a very comprehensive view of present circumstances can be formed and future goals better defined. In addition, the very discipline and self-analysis required to flesh out a plan causes clients to have a clearer understanding of themselves and their goals, making success in achieving those objectives far more realistic and likely.

Before that plan is prepared, there are four objectives that must be considered. The plan to be created:

- Must be achievable
- Must accommodate changes in lifestyle and income level

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- Should not be intimidating
- Should provide for not only the necessities but also some luxuries or rewards

Each person or family will have a unique financial plan with which to reach goals. However, there are some basic procedures that can be followed to begin a simple financial plan. These steps are common to all.

WHAT ARE THE STEPS IN THE FINANCIAL PLANNING PROCESS?

Typically, the financial planning process can be divided into the following steps:

1. Establishing the Client-Advisor relationship
2. Collecting data and information
3. Analyzing data and information
4. Recommending strategies to meet goals
5. Implementing recommendations
6. Conducting a periodic review or follow-up

Although financial planning involves the same set of steps for each client, an effective plan is a unique and specific plan that addresses the distinct needs of each client.

ESTABLISHING THE CLIENT-ADVISOR RELATIONSHIP

The client-advisor relationship starts with establishing rapport. Interviewing the client provides an opportunity to determine what issues and problems the client has identified and whether development of a financial plan will deal with them. It also helps both the advisor and the client to determine whether they feel that a long-term relationship can exist. During the interview, the advisor should discuss the financial planning approach and how it will help the client meet his or her objectives. The advisor should communicate to the client that there will be choices and decisions to be made regarding alternative strategies for dealing with planning issues. Likewise, there will be alternatives in the choice of product or service, which should also be dealt with. In some instances, the advisor may engage in what is known as a referral arrangement with a specialist or entity that is appropriately licensed to provide the other product or service. If the initial interview is successful from both the advisor's and the client's viewpoint, the advisor should formalize the relationship with either a letter of engagement or a formal contract. This is to ensure that the client is fully aware of exactly what products or services the advisor will provide and what information the advisor will require to prepare a plan. The letter should also outline matters such as the method of compensation and the client's responsibility for the compensation of any referral partners (e.g., such as lawyers and accountants).

COLLECTING DATA AND INFORMATION

An advisor contributes to a client's well-being by understanding the difference between the client's current status and future requirements and goals, and by helping to resolve these differences. To do this effectively, information must be gathered about the client. To acquire this information, an advisor has to follow intuition and instinct while applying some sound techniques for gathering data and assessing the client's requirements.

Advisors are required to know the essential details about each of their clients including:

- The client's current financial and personal status
- The client's investment goals and preferences
- The client's risk profile

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Some advisors obtain this information by creating a customized data-gathering checklist that evolves as their time and experience in the advisor role increases. Others prefer to use a readily available investor profile questionnaire from an established fund company's website or dealer. Successful advisors go beyond just knowing the essential details of a client's situation. They understand that insightful questions typically lead to meaningful responses that can reveal the following information:

- The client's unique personal needs and goals
- The process the client uses to make important decisions
- The way in which the client prefers to communicate with the advisor
- The psychological profile of the client
- The needs, goals, and aspirations of the client's family, if applicable

An advisor does far more than just manage the financial lives of clients and provide advice to help them achieve their financial goals. Clients must also be encouraged to assess and re-examine their goals in the context of their evolving business and personal lives. Clients' motivations must be understood. Sometimes the advisor has to dig deep to find them, because clients' motivations are not always readily apparent. The advisor must work with the clients to understand what makes them tick and how they can best build a financial strategy.

There are a number of methods to identify and define clients' motivations for pursuing a particular financial objective. Most of them involve actively listening to clients and interpreting their statements in the context of their unique personality, background, character and context.

It is the advisor's job to help the client articulate those emotions and build a financial strategy to keep them under control.

COMMUNICATING WITH AND EDUCATING THE CLIENT

The job of gathering information about the client is really just the start of the client communication process. This process also includes regular contact and education. Clients rely on an advisor for a number of reasons, but almost all of them share one characteristic. They all want someone to understand and attend to the details of their financial lives.

Clients want to know they have an advisor who is watching out for their interests, one who is thinking about them and is prepared to take the time and effort to call them, even when the news is not favourable.

The advisor's job will be easier if clients understand why specific decisions about the plan have been made. The advisor can explain in simple terms the technical nature of the plan's individual elements – "A global equity fund invests in stocks on markets around the world."

The greater challenge is to earn clients' full co-operation and trust in making these decisions. In fact, without a client's co-operation, advisors cannot do their job. To gain this trust, advisors have to explain how specific investments will help clients achieve their goals and what type of risks these investments carry.

OTHER INFORMATION REQUIRED

A great deal of information is necessary to prepare a plan, including:

Personal data: These include age, marital status, number of dependants, risk profile and health and employment status. An analysis of these factors may reveal special portfolio restrictions or investment objectives and thus help define an acceptable level of risk and appropriate investment goals.

Net worth and family budget: The advisor can obtain a precise financial profile by showing the client how to prepare a Statement of Net Worth and a Family Budget if the client does not already have these documents available. It is important to determine the exact composition of the client's assets and liabilities, the amount and nature of current income and the potential for future investable capital or savings. This information will be invaluable in determining

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the amount of income a portfolio will have to generate and the level of risk that may be assumed to achieve the client's financial goals.

Record keeping: Part of any financial plan includes advice or perhaps instructions for the client on keeping and maintaining adequate and complete records. It is important for family members to be aware of where records are kept so that they can access this information in an emergency. A document should be prepared which gives the location and details of wills, insurance policies, bank accounts, investment accounts as well as any other financial information. There should also be a list of the professional advisors used by the client, such as the name and contact information of any lawyers, accountants, financial planners, investment advisors, or doctors consulted by the client.

ANALYZING DATA AND INFORMATION

Your goal must be to obtain all the information needed to determine the type of mutual funds that would be suitable in view of the client's objectives and constraints. In some cases, the information obtained will lead you to suggest a revision of the client's objectives. For example, if a client has three dependants and no cash reserve, then it is premature to focus on long-term goals.

The KYC rule requires that the mutual fund sales representative gather the following information, at a minimum when opening an account for a new client:

- The client's investment needs and objectives.
- The client's personal circumstances.
- The client's financial circumstances, including annual income and net worth.
- The client's investment knowledge.
- The client's risk profile.
- The client's investment time horizon.

Based on the above and other information you gather, you can diligently decide on suitable mutual fund investments. Client account documentation should reflect all material information about a client's current status. According to CIRO's Mutual Fund Dealer Rules (MFDR), Rule 2.2.4 requires that KYC be updated regularly (once every 36 months) to reflect all material changes to the client's status to ensure the continuing suitability of investment recommendations.

Most mutual fund sales representatives have a standard application form their firms use to gather this information. Most firms require the following information:

- For all clients: name, type of account, residential address and contact information, date of birth, employment information, number of dependants, other persons with trading authorization on the account, other persons with a financial interest in the account, investment knowledge, risk profile, investment needs and objectives, investment time horizon, financial circumstances including income and net worth, and any other information required by law.
- Waiver of information: If a client refuses to provide any part of the minimum information required on the application, a waiver should be obtained from the client in written form acceptable to your dealer. Refer the client to your dealer's branch compliance officer or manager for assistance in these situations. It should also be noted that regulators scrutinize the use of waivers. They emphasize that the fiduciary requirement for firms and mutual fund sales representatives to ensure clients are invested in suitable products cannot be removed, delegated, or set aside by having a client sign a waiver. Prudent sales representatives maintain detailed notes and records of any client situation that has the potential to contravene a security law, rule, or regulation.

Correspondingly, if the client intends to place orders by fax or phone, you must have a special written authorization agreement in place, typically called a limited trading agreement or limited authorization form. The form must be signed by the client and put in place before acting on the client's request or order. Otherwise, orders taken over

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the phone could result in a discretionary trading issue or may expose you and your client to additional risk if a loss occurs. Today, calls from clients are often recorded to ensure that there is a verifiable record of the order and what was said between the sales representative and the client. Dealers also record calls for quality control and training purposes.

Your recommendations must all be based on careful analysis of information about both the client and the particular transaction. This duty is independent of whether a mutual fund order is solicited or unsolicited. Your recommendations will flow directly from the client's goals and objectives.

INVESTMENT NEEDS AND OBJECTIVES

Clients often state their **financial goals and objectives** with a particular set of targets in mind. For example:

- *"I'd like to retire at 55."*
- *"When I retire in 20 years, I'll need $60,000 in annual income."*

Financial objectives are personal and depend to a large extent on the client's tastes and preferences. For example, some clients prefer to enjoy a more expensive current lifestyle even if that might mean a more meagre retirement. Others prefer to save toward a comfortable retirement and are willing to accept a more frugal current lifestyle. Clients' individual lifestyle choices usually are not subject to debate.

Properly set objectives should be stated in clear financial terms; that is, a monetary value for a financial target should be established for whatever goal the client has in mind. A typical target for a retirement goal states how much pre-tax income should be available for a given number of years following retirement.

EXAMPLE

A 30-year-old client wants $40,000 per year in retirement income, before taxes, with the purchasing power in today's dollars, for 25 years after retiring at age 65.

Precise goals—those stated with numbers—make the whole planning process more orderly and controllable. If goals are vague, then the actions needed to attain those goals are likely to be vague as well.

Not all goals are long-term like that of a 30-year-old saving for retirement in 35 years. Some goals are short-term, such as saving for a down payment on a house (3-5 years). Others are medium term, such as saving for a child's university education (10-15 years). However, all goals should be stated as precisely as possible.

Case Study | New Parents Teresa and Patrick: Turning Dreams into Goals
(*for information purposes only*)

Teresa and Patrick are meeting with Yvonne, a financial advisor at their bank. Married for two years and with a newborn child, they are hoping to begin their investment journey and turn their financial dreams into achievable goals.

Yvonne begins by discussing the couple's dreams: first, they want to buy a house as soon as possible; second, they want to start saving for their child's education; and third, they want to begin saving for retirement as early as possible. Yvonne helps Teresa and Patrick establish their budget and cash flow, determining that the couple has limited resources after day-to-day expenses to save. Fortunately, a wedding present from Teresa's parents have given them enough for a substantial down payment towards the purchase of their first home.

Yvonne helps the couple to establish their short- (i.e., house purchase), medium- (i.e., child's education) and long-term (i.e., retirement) goals. She also advises them to have a "rainy day" fund for emergencies and unforeseen expenses. Yvonne explains the benefits of opening a Registered Retirement Savings Plan (RRSP) to take advantage of the immediate tax savings and the long-term benefit of tax-deferred compounding, while also educating them about the Home Buyer's Plan (a plan that allows qualified home buyers to use RRSP money to finance the down payment on a home).

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Case Study | New Parents Teresa and Patrick: Turning Dreams into Goals
(*for information purposes only*)

The couple agree that their first priority is to save for their home purchase, ideally within one to three years. With Yvonne's guidance, they decide to each establish an RRSP, depositing most of the funds from Teresa's parents. The remainder will be used to open a Registered Education Savings Plan (RESP) for their daughter. The couple are excited to learn that an RESP will allow them to build tax-deferred income on contributions made to the plan for a child's post-secondary education. The tax refunds from the large RRSP deposit will be used to fund a Tax-Free Savings Account (TFSA) as an emergency fund. Their excess cash flow will be split between further contributions to their respective RRSPs and the remainder will go into the RESP (RESPs and TFSAs are covered in more detail in Chapter 6).

Given the short timeframe and uncertain timing for purchasing their new home, Yvonne recommends cashable GICs to ensure that their funds are available when they need them and so that their principle is not at risk. She recommends money market funds for their TFSA, again to ensure that the funds are available whenever they may require them. She recommends a target-dated education fund for their child's RESP, which will manage the risk of the portfolio overtime, reducing the growth component as the child's targeted post-secondary education start date nears.

With their short- and mid-term dreams now achievable goals, Teresa and Patrick agree to revisit their long-term retirement savings goal. They will review their savings plans and portfolios every six months to ensure that they stay on track to realizing their dreams that have now become real goals.

Mutual fund New Account Application Forms typically offer a limited number of general objectives, such as safety of capital, maintenance of current income, capital growth (or capital gains) and tax minimization. While these are called objectives, they really represent the types of returns the client hopes to generate from the investment:

- **Safety of capital** is the return generated on investments that are least likely to erode the client's capital even in the short-term. The only type of mutual fund with this characteristic is a money market fund. All other funds contain some risk so that, in the short-term, capital may decline. This type of return is expected to just maintain the client's purchasing power. It is not expected to increase wealth. Safety of capital returns, since they come from investments such as term deposits and money market funds, are in the form of interest income.
- **Current income** is earned from mortgage funds, bond funds, preferred dividend funds, and, to a certain extent, equity funds that seek out dividend paying companies to hold in their portfolios. These fixed-income funds are riskier than money market funds, whose goal is to preserve capital and provide modest interest income. Because these funds are generally more volatile than money market funds, the client's **investment horizon** (the length of time the money is expected to remain invested) must be longer. Earning current income means not only preserving purchasing power but also generating enough income so that the client can live off the proceeds of the investment and still preserve the capital base.
- Investors seeking **capital growth** or **capital gains** must be willing to invest in the riskier types of mutual funds that offer the possibility of capital gains. Although fixed-income funds offer some capital gains potential, most capital gains are offered by equity growth funds. Portfolios consist of companies that tend not to pay current dividends but whose shares may increase in value over time. Equity growth funds can be highly volatile, so they are suitable mainly for clients with long-term investment horizons. Over the long-term, growth funds should increase the client's wealth.
- When assessing the return from any investment, you must consider the effect of taxation. The tax treatment of any investment varies depending on whether the returns are categorized as interest, dividends, or capital gains. Thus, tax treatment of the returns influences the choice among investments.

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PERSONAL CIRCUMSTANCES

Personal circumstances may represent challenges or constraints to the client's choices, including factors such as marital status, number of dependents and age. These factors have a major impact on the client's ability to bear risk and the financial goals selected.

EXAMPLE

A client who is 25 years old, single and without dependents is likely to have different short- and medium-term goals than a married, 40-year-old with two high-school-aged children. Changing personal circumstances might result in the need to make adjustments to objectives. Some objectives attainable for a dual-income couple with no children can suddenly become unattainable with the arrival of a child or the breakup of a marriage. Changing personal circumstances make personal financial planning a dynamic process requiring the regular monitoring and readjusting of goals.

Other problems or constraints may arise from the client's investment knowledge, or lack of it, and the client's risk profile.

FINANCIAL CIRCUMSTANCES

A client's **financial circumstances** are important when assessing investment suitability because it helps to determine the amount of savings a client can commit to the purchase of mutual funds and the level of risk they can afford. The better a client's financial circumstances, the more risk he or she can assume and the better the returns will be in the long run.

Financial circumstances generally improve with the size of the investment portfolio, the excess income from employment and investment over living expenses (savings), and the stability of the clients' employment situation.

An individual's ability to save depends on **cash flow**, which is the amount of money coming in from employment and other sources and the amount of money going out to pay bills. The difference between these two amounts is the **discretionary income** available for savings. **Savings** is the amount of money not needed for current expenditures.

The best way for clients to determine how much discretionary income for savings they will have is to prepare a **household budget** on a monthly or yearly basis. The format of a typical budget is shown in Figure 4.1. You may want to adopt this format when discussing budget matters with clients or in assessing your own financial situation.

Note that it has a place to enter both inflows and outflows. Key outflows include mortgage payments or rent, loan interest and repayments, and life insurance. **Life insurance** is important in that it replaces lost earnings with a lump-sum payment should the investor die. While the need for life insurance is debatable for a young, single client, it is practically a requirement for families with children.

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Figure 4.1 | A Typical Household Budget

	Monthly	Total Monthly	Total Annual
NET EARNINGS			
Self	$ _____		
Spouse	_____		
Net Investment Income	_____	$ _____	$ _____
EXPENSES & SAVINGS			
Maintaining Your Home			
Rent or Mortgage Payments	$ _____		
Property Taxes	_____		
Insurance	_____		
Light, Water & Heat	_____		
Telephone, Cable	_____		
Maintenance & Repairs	_____		
Other	_____		
TOTAL MONTHLY		$ _____	
TOTAL ANNUAL			$ _____
Maintaining Your Family			
Food	$ _____		
Clothing	_____		
Laundry	_____		
Auto Expenses	_____		
Education	_____		
Child Care	_____		
Medical, Dental, Drugs	_____		
Accident & Sickness Insurance	_____		
Other	_____		
TOTAL MONTHLY		$ _____	
TOTAL ANNUAL			$ _____
Maintaining Your Lifestyle			
Religious, Charitable Donations	$ _____		
Membership Fees	_____		
Sports & Entertainment	_____		
Gifts and Contributions	_____		
Vacations	_____		
Personal Expenses	_____		
TOTAL MONTHLY		$ _____	
TOTAL ANNUAL			$ _____
Maintaining Your Future			
Life Insurance Premiums	$ _____		
RRSP & Pension Plan Contributions	_____	$ _____	$ _____
TOTAL MONTHLY EXPENSES AND SAVINGS		$ _____	
TOTAL ANNUAL EXPENSES AND SAVINGS			$ _____
AVAILABLE FOR INVESTMENT		$ _____	$ _____

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Whatever savings the client has accumulated to date is considered part of the client's overall net worth. **Net worth** is the difference between the client's total assets and total liabilities, or more simply put, net worth is the amount owned less the amount owed. **Total assets** include the estimated market value of real estate, plus the value of all investments, and the value of all other assets held by the client. **Total liabilities** are calculated by adding up the outstanding amount on mortgages and loans (e.g., car loan). Any unpaid bills are counted as liabilities as well (e.g., income taxes payable).

The net worth number alone does not provide a complete indication of how much the client has accumulated toward his or her goals. For example, fluctuating real estate values can have a dramatic effect on a client's net worth but little significance in terms of accumulated savings. Real estate is an illiquid asset, not readily convertible to cash, and is subject to market fluctuations.

EXAMPLE

If a client owns a house worth $400,000 that she paid $50,000 for several years ago, then her net worth has increased significantly. Conversely, if a client paid $400,000 for a home that is now worth $350,000 in today's market, then there would be a reduction in net worth.

Figure 4.2 shows a typical layout of a net worth statement.

Figure 4.2 | Statement of Net Worth

ASSETS	
Readily Marketable Assets	
Cash (savings accounts, chequing accounts, etc.)	$ _____
Guaranteed investment certificates and term deposits	_____
Bonds – at market value	_____
Stocks – at market value	_____
Mutual funds – at redemption value	_____
Cash surrender value of life insurance	_____
Mortgages at principal value	_____
Other	_____
Non-liquid Financial Assets	
Pensions – at vested value	$ _____
RRSPs	_____
Tax shelters – at cost or estimated value	_____
Annuities	_____
Other	_____
Other Assets	
Home – at market value	$ _____
Recreational properties – at market value	_____
Business interests – at market value	_____
Antiques, art, jewellery, collectibles, gold and silver	_____
Cars, boats, etc.	_____
Other real estate interests	_____
Other	_____
TOTAL ASSETS	$ _____

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Figure 4.2 | Statement of Net Worth

LIABILITIES	
Personal Debt	
Mortgage on home	$ _____
Mortgage on recreational property	_____
Credit card balances	_____
Investment loans	_____
Consumer loans	_____
Other loans	_____
Other	_____
Business Debt	
Investment loans	$ _____
Loans for other business-related debt	_____
Contingent Liabilities	
Loan guarantees for others	$ _____
TOTAL LIABILITIES	$ _____
	ASSETS $ _____
NET WORTH	Minus LIABILITIES$ _____
	NET WORTH $ _____

Both net worth and annual income are categories usually covered in a mutual fund account application form. The form has a number of checkbox choices that vary from institution to institution. The net worth box provides an indication of the current status of the client's wealth, and how far the client has come toward the ultimate wealth accumulation goals. The annual income box indicates how attainable the goals are likely to be.

Savings represent surplus or **discretionary funds** (i.e., funds that are not needed for day-to-day living). All clients should build up an emergency cash reserve. How much should be held will depend on personal circumstances, but it should be in the range of three to six months of net income.

How should a mutual funds sales representative deal with clients who have little or no liquid (cash) reserve as part of their net worth? These clients tend to have relatively lower levels of employment income. This constraint limits their ability to generate a cash reserve for emergencies in the short term. If such clients want to invest in a mutual fund, then you should direct them to highly liquid mutual funds (e.g., money market funds) in case they require cash for emergencies. Other types of funds will likely have too much volatility to make them acceptable candidates for an emergency cash reserve. This is a responsible approach to take for such clients.

INVESTMENT KNOWLEDGE

Over the course of your career, you are going to meet clients with different financial and personal circumstances, goals, and objectives, all of whom will have varying degrees of financial market investment knowledge. This will be one of the most interesting, and at times challenging, parts of your role as a mutual fund sales representative. Some clients may have never invested before, while others may be highly experienced, sophisticated investors.

Think for a moment about a client complaint involving a claim that money was lost due to an unsuitable investment. At the core of this concern is the question of whether the client understood and accepted the investment risk within their account. The complaint will trigger an evaluation of the client's investment knowledge and level of sophistication and whether the advisor explained the investment risks at a level the client could understand.

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The Client Focused Reforms set out in National Instrument 31-103, 13.2(2)(c)(iv) a specific suitability determination obligation for you to collect sufficient client information regarding investment knowledge. Additional guidance is provided in its companion policy, National Instrument 31-103 CP, s. 13.2. with examples of what mutual fund sales representatives should examine to determine a client's investment knowledge. These include a review of the following factors:

- The client's previous investment experience
- Their understanding of financial markets
- Their awareness of the relative risk and limitations of the investment
- Their understanding of how the level of risk taken can impact potential returns

These policies contain information that will help you know when and how to make further inquiries if a client's KYC information appears to be inconsistent with their apparent level of investment knowledge and experience.

Investment knowledge differs widely from person to person and is an important determinant of how much investment risk a client can bear. Knowledgeable investors tend to have a better understanding of risk, as well as their own ability to bear that risk. In addition, knowledgeable investors:

- understand the risk/return trade-off of securities and mutual funds
- know how these trade-offs should be reflected in their investment portfolios

Experienced clients usually are easier to deal with, since they know what they want in investments and are aware of the risks.

RISK PROFILE

A client's risk profile requires an understanding of their willingness to accept risk (risk tolerance) and their ability to endure a potential financial loss (risk capacity). The risk profile for a client should reflect the lower of the client's willingness to accept risk and their ability to endure potential financial loss.

DETERMINING AN INVESTOR'S WILLINGNESS TO ACCEPT RISK

Figuring out how a client defines risk and exactly how much risk they are willing to accept involves asking the right types of questions during interviews and on questionnaires. Because it is hard to get a client to put their attitudes toward risk into words, one of the primary goals of a questionnaire is to pinpoint how the client defines risk and how much of it they are willing to accept to achieve their goals.

Questionnaires should contain, behavioural questions that seek to model actual client actions in different circumstances, along the lines of "if this happened, what would you do?" Typically, the answers to risk-based questions allow the assignment of different degrees of willingness to accept risk.

Once a client has completed an investor questionnaire, the answers can be used to determine the client's willingness to accept risk, usually by applying a scoring system. A point value is assigned to each potential answer.

No single question can determine a client's willingness to accept risk, as clients respond differently to different situations. However, with the completed questionnaire, a mutual fund representative can determine a client's overall willingness to accept risk by adding up the points for each response and placing the client into a risk tolerance category according to the questionnaire answer key.

DETERMINING AN INVESTOR'S ABILITY TO ENDURE POTENTIAL FINANCIAL LOSS

Assessing a client's capacity for loss involves the representative having an understanding of other factors such as the client's financial circumstances, including liquidity needs, debts, income, and assets. Another consideration in determining risk capacity is concentration, how much of a client's total investment account, or a particular security represents. Age and life stages can also be important considerations when assessing a client's ability to endure potential financial loss.

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Once these elements have been determined, a client's ability to endure potential financial loss can be fine-tuned by finding out how important their goals are and how serious the consequences will be if one or more of them are not met. If all of the goals are very important to the client, and they believe the repercussions of not meeting the goals will be severe, then the client's ability to endure potential financial loss is lower. On the other hand, if the consequences of not meeting one or a few of the goals are not serious, the client's ability to endure potential financial loss is higher.

ESTABLISHING A RISK PROFILE

A client's risk profile represents the combination of their willingness to accept risk and their ability to endure potential financial loss. As noted earlier, according to NI 31-103, a client's risk profile should reflect the lower of their willingness to accept risk and their ability to endure potential financial loss.

If both willingness to accept risk and ability to endure potential financial loss are low, then the client's risk profile is low. If both aspects are high, then the client's risk profile is high.

A client's expectations for returns in line with their investment needs and objectives may conflict with the level of risk they are willing and able to accept. A desire to meet unrealistic expectations may lead such clients to ask the representative to invest in higher-risk products that are unsuitable for them. A detailed discussion of the relationship between risk and return may be necessary to reconcile such conflicts and establish more realistic expectations.

A risk profile questionnaire is a common tool used by many mutual fund sales representatives to help them carry out a purposeful dialogue to determine a client's attitude and ability to accept risk. Risk profile questionnaires are not mandatory, but a well-crafted one can help to substantiate the financial plan or investment recommendation that may follow. Mutual fund sales representatives who use questionnaires should also know that questionnaires with standardized solutions do not remove the suitability obligation from their role. Risk profiling is as unique and complex as the clients they are designed to serve. Representatives who use profiling tools should be thorough; skipping any one question could easily result in an inappropriate solution, depending on the design and scoring of the metrics.

Correspondingly, a representative should not override the risk a client is willing and able to accept on the basis that the client's expectations for returns cannot otherwise be met given the risk profile associated with their KYC responses. The representative should identify any mismatches between the client's investment needs and objectives, risk tolerance, and capacity for loss. The questions at the source of this conflict should be revisited with the client. If the client's goals or return objectives cannot be achieved without taking greater risk than they are able or willing to accept, alternatives should be clearly explained, such as saving more, spending less, or retiring later.

Sometimes, after discussion, it is determined that the client does not have the capacity or tolerance to sustain the potential losses and volatility associated with a higher-risk portfolio. In such cases, the advisor should explain to the client that their need or expectation for a higher return cannot realistically be met, and, therefore, the higher-risk portfolio is unsuitable. The interaction with the client and the resulting decisions should be properly documented. This means a copy of the completed questionnaire, along with any comparative illustrations used to demonstrate the risk-return choices available to the client, must be maintained in the client file and be accessible to your dealer and regulator for review.

DID YOU KNOW?

CIRO provides a discussion bulletin about effective questionnaire use, the KYC process and investor protection. In the bulletin they remind registrants that risk profiling is not an exact science and they include a sample *investor questionnaire* that, in part, demonstrates how to establish a client's risk tolerance and risk capacity. To obtain a copy, please navigate to www.ciro.ca and search for 'Investor Questionnaire'.

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SUITABILITY OF INVESTMENTS

Once you have all of the needed client information, you can begin determining the **suitability** of various investments. If the client already has an investment portfolio, then you can evaluate if the fit is appropriate. If the client does not have an investment portfolio, then you can help the client to decide on an appropriate **asset allocation** or mix of investments among cash, fixed-income securities, and equities.

Setting personal financial goals and objectives is a difficult task. Your client must objectively assess personal strengths and weaknesses as well as realistically review career potential and earnings potential. Some may consider this in-depth review to be tedious and perhaps unnecessary, but it is not possible to set realistic financial goals without considering how to reach that goal. While many clients dream of striking it rich in the financial markets, those who actually reach that goal have done so by design, not by chance.

Since mutual funds are selected to suit individual needs, it is essential to develop a clear client profile. Only by studying all factors that potentially affect a client can suitable recommendations be made or an individual's investment strategy be designed.

RECOMMENDING STRATEGIES TO MEET GOALS

After collecting and analyzing the information, a plan of action must be developed for the client to follow. This plan of action may require the input of other professionals. If this is the case, the advisor should prepare a list of instructions for these professionals as well. Clearly defined goals and tasks, as well as a schedule for achievement can be of enormous benefit to the client. The financial plan should be simple, easy to implement and easy to maintain.

It is important to implement a financial plan in a timely manner. Once the preparatory work of collecting, analyzing, determining and calculating is finished, it is up to the client to decide to put all the carefully thought-out ideas and strategies in motion.

At this point the client should review the plan, the goals, the objectives and the risk profile. The client should be in agreement with them before any potential solutions are implemented. The advisor must ensure that the client understands each product that is chosen, ensure the client is aware of the potential risks as well as the potential rewards and maintain evidence of these important disclosures and determinations in the advisor's meeting summary notes.

IMPLEMENTING RECOMMENDATIONS

At this stage, the advisor may help clients implement the recommendations. Some recommendations may be immediate, such as applying for insurance or paying down debt. Other recommendations will be implemented over a longer term, such as making periodic investments, contributing funds to an RRSP, etc.

If necessary, the advisor may refer clients to a business partner such as a lawyer, tax adviser, investment adviser, real estate broker, retirement specialist or insurance representative. Advisors should be aware that business referrals must follow specific protocols to ensure the participating referral entity maintains the appropriate level of separation of duty before, during and subsequent to the referral hand-off (e.g., a mutual fund advisor may only offer products or provide services to the extent that their license allows).

CONDUCTING A PERIODIC REVIEW OR FOLLOW-UP

The last step in this whole process is the review. A financial plan should never remain static. Just as investments rise and fall in market value, a person's financial situation can change. As well, economic changes, tax increases, and health issues all can threaten even the "best-laid plans." While there is no set time frame for such a review, an annual review is the minimum required. More frequent reviews may be necessary depending on the circumstances

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(i.e., changing tax, economic or employment status). In extreme circumstances, such as a job loss, it may be necessary to devise a completely new financial plan.

Revisions can include reviewing a will, changing beneficiaries and ensuring that the client is continuing to take advantage of all available tax savings techniques. Recommendations can be simple – in that no changes are necessary – or they could entail a great number of changes. It is important that the advisor follow-up with the client to ensure that suggestions are carried out.

This overview of the financial planning process provides the client with the structure of a basic financial plan, but does not deal with specialized issues such as trusts, estate freezes, the need for insurance, etc. To complete a thorough analysis of investment needs and requirements, these areas must be addressed as well; however, it is beyond the scope of this text to do so. A more thorough discussion of these topics is provided in more advanced courses offered by CSI.

GATHERING INFORMATION

How do you gather information and assess client needs to prepare a financial plan? *Complete the online learning activity to assess your knowledge.*

WHAT IS THE LIFE-CYCLE HYPOTHESIS?

To add perspective to getting to know a client, it can be helpful to think in terms of a client's typical investing life cycle. The basic idea behind the **life-cycle hypothesis** is that as people age, their objectives, financial and personal circumstances, investment knowledge, and risk profile change as well. When dealing with clients, you can make the general assumptions that:

- Older clients tend to be more risk averse than younger clients.
- Younger clients tend to focus on shorter term financial goals — such as saving for major purchases, such as a home.
- Older clients tend to focus more on retirement and estate-building.

The life-cycle hypothesis, developed during the 1950s by several North American and European economists, has great potential benefit to a mutual fund professional. It suggests that if you know the age of your client, then you can infer a number of investor characteristics, such as goals, circumstances and risk profile. Certainly, if the life-cycle hypothesis is valid, it should make "knowing your client" an easier task.

The good news is that the life-cycle hypothesis works for many clients. The bad news is that it does not work for all of them. In getting to know a particular client, a good strategy is to assume that the life-cycle hypothesis holds. However, you must be sensitive to the fact that you may have to change your mind as you obtain more information about a particular client. Special circumstances require an individualized approach.

THE STAGES IN THE LIFE CYCLE

There are five stages in the life-cycle:

1. Early earning years – to age 30
2. Family commitment years – 25 to 35
3. Mature earning years – 30 to 50
4. Nearing retirement – 45 to 65
5. Retired – 50 and onwards

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In general, each stage corresponds to an age grouping. As you can see, the age of a client does not unambiguously indicate a position in the life cycle. There is a considerable amount of overlap to account for the fact that every client is unique. For example, a 30-year-old client could be in any one of the first three stages. You will need additional information about this client to pin down the stage.

STAGE 1: THE EARLY EARNING YEARS – TO AGE 30

The early earning years generally start when an individual begins to work and ends when family commitments or other commitments start to impose financial demands. Stage 1 investors, in general, are free of the family and financial commitments of the next stage. They are interested in saving, but their goals are usually short term. Car purchases and vacations are two typical goals. These clients tend not to have life insurance and probably do not need it, since no one else depends on the continuity of their earnings.

By age 30, if a client has not yet begun a family, it is likely that they nevertheless have made some of the same major financial commitments that their married counterparts have made, such as buying a house. It is possible, however, that even after the age of 30, some people would still be considered Stage 1 investors.

Because these investors are young, often they are psychologically prepared to tolerate a substantial amount of investment risk. This might lead them to invest in riskier types of assets with volatility characteristics more suitable for investors with higher income and longer investment time horizons. Certainly, if Stage 1 clients decide to invest for the long term, they will likely allocate their investments to riskier assets.

The action of allocating assets into investments that have different levels of risk is called "asset allocation" and will be discussed in detail later in this course. A typical asset allocation for long-term goals might be 80% equity funds, 10% bond funds and 10% money market funds.

EXAMPLE

Henry is 28 and graduated from college a few years ago with a degree in broadcasting. He rents an apartment in the city and is saving for a down payment on a house. He recently bought a used car that required a small bank loan. Although he has only a small amount to invest, most of his money is held in two equity mutual funds and two conservative funds.

How he invested his money—80% in equity funds; 10% in a bond fund; 10% in a money market fund—reflects the higher risk profile of a typical Stage 1 investor.

STAGE 2: THE FAMILY COMMITMENT YEARS – 25 TO 35

The difference between people at Stage 2 and those at Stage 1 is the level of commitment and responsibilities that have to be assumed. A typical Stage 2 client is fairly young and married with children. Marriage itself does not necessarily result in a change of stage, especially if a couple does not plan to have children or buy a home. In most cases, however, marriage will result in a shift in financial goals.

There is little doubt that the arrival of a child has a major impact on goals and the ability to attain them. It might become more difficult to save because of the added expenses. Also, saving for post-secondary education is likely to become an important goal.

One of the distinguishing characteristics of Stage 2 clients is their lack of liquidity. They generally have mortgage and car payments. Many dual-income couples see their disposable incomes decline with the arrival of children because of substantial daycare costs or, in some cases, the complete or partial elimination of one salary. Life insurance becomes a requirement rather than a discretionary expenditure.

The lack of liquidity has a significant impact on the savings pattern of Stage 2 clients. First, although they might identify long-term goals, such as retirement saving, they can barely manage to save enough for more pressing short-term goals. This is particularly true for younger Stage 2 clients. As salaries increase with job experience, more savings can be deployed into medium-term goals such as the children's education. It is typically difficult for Stage 2 clients to save for the long term.

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EXAMPLE

Isabelle recently married Marcus, her partner of four years. In their early thirties, they have good careers and this makes their mortgage and car payments each month quite manageable. They have also shown good discipline in setting up automatic savings plans each month. They consider themselves long-term investors and so far have invested primarily in domestic and foreign equity funds. Upcoming life challenges: Isabelle and Marcus would like to start a family in the next couple of years and are starting to consider how this may impact their investment decisions.

The asset allocation for this stage reflects the nature of investment goals as well as a changing ability to bear risk psychologically. A client who was highly risk tolerant when single is likely to be less risk-tolerant when married with children. If a client had an allocation of 80% equity funds, 10% bond funds and 10% money market funds when in Stage 1, that allocation might shift to reflect both the shorter investment time horizons of the new goals as well as a greater degree of risk aversion. A new allocation might be 50% equity funds, 20% bond funds and 30% money market funds. The move from the riskier asset allocation to the new, more conservative one, would likely be accomplished gradually. This means that most of the new investments for a Stage 2 client will be in the lower-risk fund categories.

STAGE 3: THE MATURE EARNING YEARS – 30 TO 50

It is difficult to say exactly when Stage 3 takes over from Stage 2. For some clients, the transition will occur early. For others, it will occur far later in life. The critical factor determining the transition is almost certainly the family's level of disposable income. A two professional income family will have a short Stage 2. A single blue-collar income family might never leave Stage 2.

Stage 3 clients may be able to save for all of the goals they have identified. In many cases, they have already made provision for both short- and medium-term goals and they focus their attention primarily on retirement savings. They are probably not much more risk averse than they were in Stage 2.

The asset allocation for Stage 3 clients is likely to shift back toward a higher weighting for equity funds. The first reason for this shift in comparison to Stage 2 is the longer investment time horizon for retirement saving. A second reason for the shift to equities is the result of a need to minimize taxes. These clients are often in the highest marginal tax bracket. Investments in bond and money market funds will generate interest income that is fully taxed. Equity funds, on the other hand, generate returns in the form of dividends and capital gains, both of which are taxed at lower rates than interest income.

The asset allocation for Stage 3 clients will depend on the range of investment goals identified.

EXAMPLE

Sophia and Hank are in their late 40s and have two children in their early teens. Hank was recently promoted to a senior position at his company and Sophia's consulting business is thriving. Although these changes allow them to save more of their earnings, the challenges they face include savings for their children's education and shifting some of their saving focus to their own retirement planning. How they are planning to allocate their investments: 40% equity growth funds, 30% equity funds, 20% bond funds, and 10% in money market funds.

It is worth repeating, however, that the goals of Stage 3 clients will determine the asset allocation. That allocation can be very different, therefore, from client to client.

STAGE 4: NEARING RETIREMENT – 45 TO 65

There are two key differences between clients in Stage 4 and Stage 3. First, Stage 4 clients have fewer family commitments. Children may already have left home to go to school or are married. Second, Stage 4 clients have come to the realization that in a few years they will have to rely on their savings in order to maintain their standard

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of living. This tends to make them more risk averse than investors in Stage 3. Clients in this stage are generally in their peak earning years.

EXAMPLE

Nigel and Grace are in their early 50s and are empty nesters. Their son lives on his own and has a career of his own. Nigel runs his own home-based business while Grace works in health care. Although they saved regularly, Nigel admits that saving for retirement was not a priority; paying their mortgage and putting their son through school took priority. Challenges: Nigel and Grace want to begin to save aggressively for retirement so that they can maintain the lifestyle they are comfortable living.

As a result of these changes, Stage 4 clients are likely to still want tax minimization, but they might shift their portfolios away from equity growth funds while maintaining a substantial equity component. However, their growing risk aversion will tend to make this equity component shrink as time goes on.

STAGE 5: RETIRED

Retired clients are faced with a conflict. On the one hand, they rely on their retirement savings to maintain a certain standard of living. On the other hand, they need to keep their remaining funds invested in order to generate a good enough return on which to live. The problem is that better returns can be earned only with riskier investments, but these investors cannot readily accept a high level of risk with retirement savings. In addition, they are less able to bear risk psychologically.

You should also be aware that over the past decade regulators have implemented several new policy, education, and regulatory initiatives specifically designed to protect the type of retired investors that fall within this stage. Servicing aging and vulnerable investors requires special attention, especially if confronted with a situation involving the exploitation of a senior or a client with diminished mental capacity. In these instances you must continually endeavour to observe, identify, and record any apparent red-flags and also document how each of are subsequently addressed.

Stage 5 clients also have another possible concern not shared with those in Stage 4: if they have sufficient retirement savings, they also tend to focus on estate building and wealth transfer. They want to leave something for children and grandchildren.

The asset allocation for retirees will most likely shift toward less risk. Therefore, the equity component will decline in favour of less volatile fixed income and safety investments.

EXAMPLE

Marge and Vince retired several years ago after working for over 40 years. Although comfortable with their level of retirement income, they watch their money very closely. After retiring, Vince shifted most of the couple's mutual fund investments to money market funds. However, he did keep about 10% of their investments in equity funds. Challenges: Maintaining their lifestyle is a key priority. They have also promised to help fund the education costs for their four grandchildren.

SUMMARIZING THE LIFE CYCLE

You can summarize the features of the life-cycle hypothesis by looking at how investment goals, personal circumstances, financial circumstances, investment knowledge and risk profile change as people age. Table 4.1 summarizes these factors.

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Table 4.1 | Implications of the Life-Cycle Hypothesis

	Investment Goals	Personal Circumstances	Financial Circumstances
Stage 1 Early earning years – to age 30	Generally short term but could also have a longer-term component.	Generally light.	Small investment portfolios, but growing, financial commitments, such as car payments.
Stage 2 Family commitment years – 25 to 35	Shorter term with a medium-term component.	Become heavier.	Financial burdens, such as mortgage payments, childcare expenses, increase. They tend to have little liquidity.
Stage 3 Mature earning years – 30 to 50	Medium term with a substantial long-term component.	These commitments have moderated to a certain extent.	Circumstances have greatly improved. It is during this stage that most of the increase in a client's wealth will occur. More attention must be devoted at that point to attaining an asset allocation in keeping with the client's risk profile.
Stage 4 Nearing retirement – 45 to 65	With retirement approaching, goals tend to shift to the medium term.	Family commitments are once again light.	Clients have substantial investment portfolios with little in the way of day-to-day liquidity requirements.
Stage 5 Retired – 50 and onwards	Goals are medium term in the sense that the existing investment portfolio must continue to earn income over the medium term.	Could see an increase in family commitments to help grandchildren.	Retired clients' financial commitments are light and their portfolios must be able to maintain living standards.

The table does not include columns for investment knowledge or risk profile, because changes in both can apply across the entire life cycle:

- Investment knowledge is likely to increase as the client ages. However, some Stage 1 investors have formal training in finance, and many Stage 3 clients have never invested in anything other than bank deposits.
- Risk profile also changes with age. Young people are more psychologically able to bear risk. However, this willingness to bear risk tends to decline as they move to their next life cycle stage.

Asset allocations vary with each changing stage and are affected by all the constraints indicated above. However, it is important to note that the single most important determinant of clients' asset allocations at any stage is their psychological willingness to bear risk. Some retirees have a very high tolerance for risk, and some 25-year-olds do not. As a result, some retirees have investment portfolios containing a substantial equity fund component, while some much younger investors refuse to invest in anything other than money market funds or GICs. Your job is to ensure the plan continually keeps pace with your clients' life cycle changes, ensure the KYC on file is kept current and review the financial plan at least annually.

Explanatory models can be useful because they extract the key features of a complicated concept and make it easier to understand. However, no model can be applicable in every case. In most cases, when you know some key basic personal data about a client and estimate the client's life-cycle stage, you will be exactly right. However, in some other cases, you will obtain personal data and find that the client does not fit smoothly into any of the

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defined life-cycle stages. In these cases, it is important not to force people into a particular stage. You should use the life-cycle hypothesis as a broad tool to help you understand a client's overall needs, to bolster the level of your client-advisor conversations and to substantiate the rationale behind the advice that you provide.

LIFE CYCLE HYPOTHESIS

What are the characteristics of the various life stages according to the life cycle hypothesis? *Complete the online learning activity to assess your knowledge.*

THE PLANNING PYRAMID

Your understanding of the financial planning approach to managing a person's wealth benefits both you and your clients. Financial planning involves an analysis of the client's age, wealth, career, marital status, taxation, estate considerations, risk profile, investment objectives, and legal and other matters. This information provides a comprehensive view of the client's circumstances and future goals. In addition, the discipline and self-analysis required to create a personal financial plan helps the client to better understand his or her goals, improving the chances of achieving them.

The financial planner puts together the plan, coordinating the advice solicited from other experts in various fields. You may be one of those experts. That is, your role as a mutual fund sales representative could be one part of the overall plan for a client through the advice you provide on mutual fund investments. You must restrict yourself to giving advice only for the services you are licensed to provide or in which you are an expert. For example, you should not give advice on the legal aspects of an estate plan; a lawyer is best suited to do that and to draft documents such as wills.

Exhibit 4.1 | The Financial Planning Pyramid

One other tool to help the client and advisor to both clarify the client's current situation and identify planning needs is the financial planning pyramid. Although the **financial planning pyramid** may appear simplistic, it often helps for the advisor to use visual aids in dealing with clients. The financial planning pyramid helps the advisor and the client alike visualize goals and objectives and review investment strategy.

If the client is interested in precious metals for example, but lacks a Will and the proper insurance coverage, it is obvious that, by starting at the top with precious metals, the groundwork has not been done and the plan will be unstable. The client must have a good strong base from which to work to successfully reach the goals and objectives set.

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Case Study | Winston's Pyramid: A Wealth of Choices (*for information purposes only*)

Financial advisor Paul is meeting with his wealthiest client, Winston, who has contacted Paul for advice on investing a large sum of money. Winston, 60 years old, is a successful business owner who was widowed two years ago. He has three children, now all adult-aged and self-sufficient. He has excellent cash flow from his business and investments. His home, cottage and Florida condominium are all paid for. He has no personal debt.

Through the years, Paul helped Winston and his wife build up their wealth, at first helping them maximize their savings through RRSPs for their retirement and RESPs for their children's education. Eventually, through Winston's business success, they were able to grow their personal real estate holdings while over time paying off all associated mortgage debt.

Paul has helped Winston grow his portfolio over the years through the use of ever-more sophisticated investments, including stocks, bonds and commodities. As his taxable income has risen, Paul has helped Winston establish investment tax shelters and used tax-effective investments, like corporate class funds, to reduce his tax bite.

Today, with more funds to invest, Paul refers to the Financial Planning Pyramid to assist in determining the best investment options for the new funds. With such a secure financial situation, Winston can afford to be very aggressive with his investment choices, taking advantage of the unique tax and return opportunities of the top level of the pyramid.

Referring to the pyramid, Winston has no desire to invest in IPOs, over-the-counter (OTC) securities or precious metals directly, even though his financial circumstances would allow him to do so. So, with estate planning in mind, Paul recommends that Winston consider establishing a real estate investment portfolio to produce rental income and achieve long-term capital appreciation. He suggests Winston consider purchasing a rent-producing property for each of his children, owning them jointly. With their tax advantages and potential price appreciation, a long-term investor like Winston can easily deal with the ups and downs of the real estate market. He can pass along the capital appreciation of the properties to his children while providing them with additional cash flow today.

FINANCIAL PLANNING PYRAMID

Can you visualize the goals and objectives of the financial planning pyramid? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Describe the client communication and planning process.
   - A mutual fund sales representative evaluates investment suitability usually on the basis of a client's predetermined financial goals and objectives.
   - Client information provides you with a comprehensive view of client circumstances and future goals.
   - One tool to help clarify a client's current situation and identify planning needs is the financial planning pyramid.
2. Summarize the six steps of the planning process, and describe how to apply them to client scenarios.
   - Gathering information properly fulfills legal requirements and allows an advisor to plan effectively for the client.
   - The six steps in the financial planning process are:
     - Establishing the Client-Advisor relationship
     - Collecting data and information
     - Analyzing data and information
     - Recommending strategies to meet goals
     - Implementing recommendations
     - Conducting a periodic review or follow-up
3. Describe and differentiate between the five stages of the life-cycle hypothesis.
   - The basic idea behind the life-cycle hypothesis is that as people age, their objectives, financial and personal circumstances, investment knowledge, and risk profile change as well.
   - The life-cycle suggests that if you know the age of your client, then you can infer a number of characteristics, such as goals, circumstances and risk profile. If valid the life-cycle hypothesis makes knowing your client an easier task.
   - The early earning years in Stage 1 generally start when an individual begins to work and ends when family commitments or other financial commitments start to impose demands.
   - During the family commitment years in Stage 2, personal commitments and responsibilities generally increase as family dynamics change; for example, having children and buying a home. Lack of liquidity has a significant impact on clients in this stage.
   - The critical factor determining the transition from Stage 2 to Stage 3 is almost certainly the family's level of disposable income. Stage 3 clients may be able to save for all of the goals they have identified.
   - Stage 4 clients have fewer family commitments. Stage 4 clients have also come to the realization that in a few years they will have to rely on their savings in order to maintain their standard of living. Clients in this stage are generally in their peak earning years.
   - Stage 5 clients in retirement are generally faced with a conflict. On the one hand, they rely on their retirement savings to maintain a certain standard of living. On the other hand, they need to keep their remaining funds invested in order to generate a good enough return on which to live.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 4 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 4 FAQs.

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Behavioural Finance 5

CONTENT AREAS

Investor Behaviour

How do Representatives Apply Bias Diagnoses when Structuring Asset Allocations?

LEARNING OBJECTIVES

1 | Define behavioural finance and the most common behavioural biases.

2 | Differentiate between cognitive and emotional biases.

3 | Explain how these biases can be used to better understand client attitudes toward finance and investment decisions.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

availability bias

behavioural biases

behavioural finance

best practical allocation

biases

cognitive bias

emotional bias

endowment bias

hindsight bias

January Effect

loss aversion

overconfidence

regret aversion

representativeness bias

status quo bias

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INTRODUCTION

So far in this course you've learned that attaining financial objectives depends to a large degree on a client's ability and willingness to bear risk. A client is able to bear risk when financial and personal circumstances permit. His or her willingness to bear risk depends on psychological makeup and past experience.

Because there are so many combinations of personal factors, financial factors, psychological factors and financial goals, you may never meet two clients with identical profiles. Each client is unique and must be treated as such. However, some general aspects of investment behaviour are common to all clients. These common aspects have to do with age and psychological make-up.

The focus of this chapter is providing you with the tools to better recognize the needs of your clients by understanding their different personality and life-cycle characteristics. Having a better appreciation of personal motivations for investment decisions will allow you to provide better service and meet clients' needs more closely.

INVESTOR BEHAVIOUR

Even though each individual client is different, research has shown that people tend to make important investment decisions in ways that are not always consistent with most traditional theories of investment management. Many of these approaches have to do with how an individual defines risk, and you should be aware of these approaches when developing recommendations for a client.

You can also use personality profiling to understand why clients make the decisions they do. Personality typing assigns a client to a specific type characterized by certain attitudes and behaviours. You cannot, however, rely too much on the results of such a test; it should only be used as a general guide to how the client might make a decision or react in a certain situation.

Financial decision making is not always entirely rational. Behavioural finance is a field of study that combines psychology and economics to explain why and how investors act and how that behaviour affects financial markets.

BEHAVIOURAL FINANCE

Over the past twenty-five years, human psychologists have made significant contributions to further our understanding of how investors behave. Behavioural finance theory challenges much of what economists and investment theorists, who study what is sometimes called traditional or standard finance, have to say about how individuals make investment decisions.[1]

Behavioural finance theory contends that as human beings, investors are not necessarily rational or logical creatures. They are subject to personal beliefs and **biases** that may lead to irrational or emotional choices and decisions. Behavioural finance is commonly defined as the application of psychology to understand human behaviour in finance or investing.

Many students of the securities markets are taught that markets are, or should be, efficient. However, researchers have uncovered abnormal market behaviours, such as the **January Effect**, where stocks in general, and small stocks in particular, move abnormally higher during the month of January, that demonstrate that human behaviour influences securities prices and markets.

Standard theories of finance and investing assume that investors are:

- Risk averse
- Rational in their decision-making abilities

[1] Source: Amos Tversky, "The Psychology of Decision Making," Behavioral Finance and Decision Theory in Investment Management. Charlottesville, Association for Investment Management and Research, 1995.

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Theories from behavioural finance, on the other hand, suggest that investors:

- Can be risk averse or risk seeking, depending on the situation
- Can act irrationally, thus creating market opportunities

Standard finance is characterized by rules about how investors *should* behave rather than by principles describing how they *actually* behave. Behavioural finance, in contrast, identifies with and learns from human behaviour that individual investors demonstrate in financial markets. Standard finance grounds its assumptions in *idealized* financial behaviour, in other words, whereas behavioural finance is based on *observed* financial behaviour.

A mutual fund sales representative who understands how investor psychology can affect an individual investor's decisions, and consequently investment outcomes, will have insights that can only benefit the advisory relationship. A key result of a behavioural finance-enhanced relationship is a portfolio that the client can live with during up markets and down markets. A client who understands his or her investing behaviour — learned through working with the representative — will develop a stronger relationship with the representative.

BEHAVIOURAL BIASES

In the investment world, **behavioural biases** are defined as systematic errors in financial judgment or imperfections in the perception of economic reality. Researchers have identified a long list of investor biases, categorizing them according to a meaningful framework. Some refer to biases as simple, efficient rules of thumb; others call them beliefs, judgments or preferences. Other researchers have classified biases along cognitive (relating to conscious intellectual activity such as thinking, reasoning and remembering) or emotional (relating to emotional responses to stimulus).

Behavioural biases fall into two broad categories, cognitive and emotional, with both yielding irrational judgements. This section introduces some of the most common ones.

A **cognitive bias** can be technically defined as basic statistical, information processing or memory errors that are common to all human beings. They can be thought of also as "blind spots" or distortions in the human mind. One of the most common cognitive biases is anchoring bias. Here, clients get *anchored* to the price of a stock or the level of the market and hold on to that price before being willing or able to make an investment decision.

Cognitive biases do not result from emotional or intellectual predisposition toward a certain judgement, but rather from subconscious mental procedures for processing information.

Investors are subjected to large volumes of information and data, and to make sense of it all, they opt for simplified information processing when making investment decisions. A good example of this is evaluating a class of mutual funds, say U.S. small capitalization. Even using a research service such as Morningstar, which helps clients screen funds, the information flow is so immense that they inevitably rely on shortcuts such as "best 12-month return" to make a fund choice. Because cognitive biases stem from faulty reasoning, better information and advice can often correct them.

On the opposite side of the spectrum from illogical or distorted reasoning are the **emotional biases**. An emotion is a mental state that arises spontaneously, rather than through conscious effort. Emotions are physical expressions, often involuntary, related to feelings, perceptions or beliefs about elements, objects or relations between them, in reality or in the imagination.

Individuals feeling emotions may wish to control them but often cannot. Investors can be presented with investment choices, and may make sub-optimal decisions by having emotions affect these decisions. Often, because emotional biases originate from impulse or intuition rather than from conscious calculations, they are difficult to correct.

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OVERVIEW OF BEHAVIOURAL BIASES

An overview of common biases is presented below. In the next section, a diagnostic testing example for one bias, loss aversion, one of the emotional biases, is provided to illustrate how the assessment process works.

COGNITIVE BIASES

OVERCONFIDENCE

Overconfidence is defined generally as unwarranted faith in one's intuitive reasoning, judgements and cognitive abilities. People tend to overestimate both their predictive abilities as well as the precision of the information they have been given. Sometimes, people realize that events they thought were certain to happen did not occur, but they don't learn from these mistakes. In the investing realm, people think they are smarter and have better information than they actually do. For example, an investor may get a tip from a contact in the securities industry or read something on the Internet about an investment opportunity, and then take action (that is, make the decision to invest) based on her perceived knowledge advantage.

REPRESENTATIVENESS

Because human beings like to stay organized, they develop, over time, an internal system for classifying objects and thoughts. When confronted with new circumstances that may be inconsistent with existing classifications, they often rely on a "best fit" process to determine which category should house and form the basis for understanding the new circumstance. This perceptual framework provides a practical tool for processing new information by simultaneously incorporating insights gained from past experiences. Sometimes, however, new stimuli are representative of elements that have already been classified, while in reality, there are differences. In such an instance, the classification reflex is wrong, and it produces an incorrect understanding of the new element that often persists and biases future interactions with that element. This is known as a **representativeness bias**.

In the investment realm, a client may be presented with an investment opportunity that contains some elements representative of a good investment. The client's desire to mentally classify the investment opportunity may cause him to classify what is really a poor investment opportunity as a good investment opportunity, based on the few elements that are representative of a good investment opportunity.

HINDSIGHT BIAS

Hindsight bias refers to the belief that the outcome of an event was predictable, even if it was not. This happens because the actual outcome is clear in a person's mind, but the numerous outcomes that could have occurred but did not are rather fuzzy. Therefore, people tend to overestimate the accuracy of their own predictions. For example, a stock goes up and an investor feels that he "knew it all along," when in fact the outcome was unpredictable. Hindsight bias may prevent an investor from reviewing and learning from past mistakes, leading to a tendency to make the same mistakes again.

AVAILABILITY

The **availability bias** allows people to estimate the probability of an outcome based on how prevalent or familiar that outcome appears in their lives. People exhibiting availability bias perceive easily recalled possibilities as being more likely than outcomes that are harder to imagine or difficult to comprehend. One classic example cites the tendency of most people to guess that shark attacks cause fatalities more frequently than injuries sustained from falling airplane parts. However, the latter has been shown to be thirty times more likely to occur. Shark attacks are, probably, assumed to be more prevalent because sharks invoke greater fear, or because shark attacks receive a disproportionate degree of media attention. Mutual fund advertising is a good example of availability bias. Investors who see a certain company's advertisements frequently may believe that that company is a good mutual fund company, when it's possible that a company that does no advertising is better.

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EMOTIONAL BIASES

ENDOWMENT

People who are subject to **endowment bias** place more value on an asset they hold property rights to than on an asset they do not hold property rights to. This behaviour is inconsistent with standard economic theory, which says that a person's willingness to pay for a good or object should be equal to the person's willingness to sell the good or object. Psychologists have found that the minimum selling prices that people state tend to exceed the maximum purchase prices they are willing to pay for the same good. Investors continue to hold securities they own rather than disposing of them in favour of better investing opportunities.

LOSS AVERSION

Loss aversion bias states that people generally feel a stronger impulse to avoid losses than to acquire gains. The possibility of a loss is, on average, twice as powerful a motivator as the possibility of making a gain of equal magnitude. That is, a loss-averse person might demand, at minimum, a two-dollar gain for every one dollar placed at risk. In this scenario, risks that don't "pay double" are unacceptable. Loss aversion can prevent people from unloading unprofitable investments, even when they see little to no prospect of a turnaround. Some industry veterans have coined a diagnosis, "get-even-itis", to describe this condition whereby a person waits too long for an investment to rebound following a loss.

REGRET AVERSION

People who are subject to **regret aversion** bias avoid making decisions because they fear, in hindsight, that whatever they decide to do will result in a bad decision. An example of regret aversion is observed when investors hold on to losing positions too long in order to avoid admitting errors and realizing losses. When investors experience negative investment outcomes, they feel instinctually driven to sell – not to press on and snap up potentially undervalued stocks. However, periods of depressed prices often present the greatest buying opportunities. People suffering from regret aversion bias, therefore, hesitate most at moments that actually may merit aggressive behaviour.

STATUS QUO

Status quo bias is an emotional bias that predisposes people, when faced with a wide variety of options, to choose to keep things the same (that is, to maintain the status quo). The scientific principle of inertia, which states that a body at rest shall remain at rest unless acted upon by an outside force, is a similar concept. Status quo bias can cause investors to hold securities with which they feel familiar or emotionally fond. This behaviour can compromise financial goals, however, because a subjective comfort level with a security may not justify holding onto it despite poor performance.

IDENTIFYING BEHAVIOURAL BIASES IN CLIENTS

Some mutual fund representatives are naturally good at identifying irrational behaviours in their clients. Others need some assistance. A diagnostic test for loss aversion, below, provides an understanding of how a bias is diagnosed.

Question 1: You are asked to choose between the following two outcomes:

a. An assured gain of $475
b. A 25% chance of gaining $2,000, and a 75% chance of gaining nothing

Question 2: You are asked to choose between the following two outcomes:

a. An assured loss of $750
b. A 75% chance of losing $1,000, and a 25% chance of losing nothing

How is the loss-averse client likely to respond?

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SCORING GUIDELINE

Question 1: The rational response is *b*, but loss-averse investors are likely to opt for the assurance of a gain in *a*.

Question 2: The rational response is *a*. Loss-averse investors are more likely to select *b*.

The logical question at this point is: "*Fine, so I know what biases my client has... what do I do with this knowledge?*" By the end of this chapter, this question will be dealt with, in a discussion on how the mutual fund sales representative goes about creating a behaviourally adjusted portfolio, one that moderates or adapts to a client's biases. First, though, consider the equally intriguing question below of gender differences that may affect an investor's decision-making behaviour.

GENDER AND BEHAVIOURAL FINANCE

Gender and behavioural finance is a potent subject. Men and women behave quite differently when it comes to investing, and it is important to understand and remember these differences.

With regard to gender differences:

- Women believe that random sequences with no automatic correlation display positive correlation in reality. For example, many basketball coaches and players believe that a player who has made several shots in a row is more likely than usual to make the next shot; that is, they see patterns where perhaps none exist.
- Men are more overconfident and optimistic than women.
- Women are more likely to buy and hold.
- Men are one-third more risk tolerant than women.

Some studies concluded that women are less optimistic or more skeptical than men, and they are also generally less risk tolerant than men. In November 2005, Alexandra Niessen and Stephan Ruenzi from the University of Cologne completed a study entitled "Gender and Mutual Funds".[2] They examined all single managed U.S. equity mutual funds from 1994–2003. In the study, 10% of fund managers were women. They found that female managers take less risk, follow less extreme investment styles (i.e., execute more consistent styles), are less overconfident and trade less. Women who are less risk tolerant and trade less tend to balance out men who tend to be aggressive in these areas. Mutual funds representatives should listen to both the male and the female partner, and attempt to arrive at a risk assessment that reflects a balance between them.

Figure 5.1 provides a summary of major male and female biases. Generally, men are more susceptible to cognitive biases and women are more susceptible to emotional biases.

Figure 5.1 | Typical Biases Men and Women Are Susceptible to

Men are susceptible to:	Women are susceptible to:
Overconfidence bias (Cognitive)	Endowment bias (Emotional)
Loss aversion bias (E)	Status quo bias (E)
Availability bias (C)	Representativeness bias (C)
Hindsight bias (C)	Regret aversion bias (E)

So, people are neither perfectly rational nor perfectly irrational, but possess diverse combinations of rational and irrational characteristics. Most individuals can benefit from a mutual fund sales representative's help in balancing and overcoming their biases, perceptions and irrational approaches to investing.

[2] Source: Niessen, A and Ruenzi, S. "Sex Matters: Gender and Mutual Funds." Department of Finance, University of Cologne, Germany, November 2005.

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HOW DO REPRESENTATIVES APPLY BIAS DIAGNOSES WHEN STRUCTURING ASSET ALLOCATIONS?

Many mutual fund sales representatives, when designing an asset allocation program for a client, typically first administer a risk profile questionnaire, then discuss the client's financial goals and constraints, and then recommend an asset allocation. Less-than-optimal outcomes are often a result of this process because the client's psychological biases may not be accounted for.

Instead, investors may be better served by adjusting risk and return levels depending upon their behavioural tendencies. This is called a client's **best practical allocation**. A best practical allocation may slightly underperform over the long term and have lower risk, but is an allocation that the client can comfortably adhere to over the long run. Many clients, in response to a market downturn, want to sell in a panic. Conversely, a client's best practical allocation might contradict their natural psychological tendencies, and these clients may be well served to accept risks in excess of their individual comfort levels in order to maximize expected returns because, for example, they risk outliving their assets. The ability to create best practical allocations is what mutual fund sales representatives should gain from this section.

The following has been adapted from an article that Michael Pompian and John Longo originally published in the March 2005 *Journal of Financial Planning*. It sets forth two principles for constructing a best practical allocation, in light of client behavioural biases:

- Moderate biases in less-wealthy clients; adapt to biases in wealthier ones.
- Moderate cognitive biases; adapt to emotional ones.

These principles are not intended as prescriptive absolutes, but rather should be used along with other data on the client's risk profile, financial goals, asset class preferences and so on. The principles are also general enough to fit almost any client situation.

When considering behavioural biases in asset allocation, mutual fund sales representatives must first determine whether to moderate or adapt to "irrational" client preferences. This decision basically involves weighing the rewards of sustaining a calculated, profit-maximizing allocation against the outcome of potentially affronting the client – whose biases might position him or her to favour a different portfolio structure entirely. Here are guidelines for resolving the puzzle of when to moderate and when to adapt.

MODERATE BIASES IN LESS-WEALTHY CLIENTS; ADAPT TO BIASES IN WEALTHIER ONES

A client outliving his assets constitutes a far graver investment failure than his inability to accumulate the greatest possible wealth. If an allocation performs poorly because it conforms, or adapts, too willingly to a client's biases, then a less-wealthy client's standard of living could be seriously jeopardized. The most financially secure clients, however, would likely continue to reside in the 99.9th socioeconomic percentile. In other words, if a biased allocation could put a client's way of life at risk, moderating the bias is the best response. If only a highly unlikely event such as a market crash could threaten the client's day-to-day security, then overcoming the potentially sub-optimal impact of behavioural bias on portfolio returns becomes a lesser consideration. Adapting is, then, the appropriate course of action.

MODERATE COGNITIVE BIASES; ADAPT TO EMOTIONAL ONES

As already seen, behavioural biases fall into two broad categories, cognitive and emotional, with both yielding irrational judgements. Because cognitive biases stem from faulty reasoning, better information and advice can often correct them. On the other hand, because emotional biases originate from impulse or intuition rather than conscious calculation, they are difficult to rectify. In some cases, heeding these two principles simultaneously yields a blended recommendation. For instance, a less-wealthy client with strong emotional biases should be both

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adapted to and moderated. Figure 5.2 illustrates this situation. Additionally, these principles tell us that two clients exhibiting the same biases should sometimes be advised differently.

Figure 5.2 | A Visual Depiction of Best Practical Allocation

Source: Pompian, M. and Longo, J. "Incorporating Behavioral Finance Into Your Practice." *Journal of Financial Planning*, March 2005, 58–63.

Understanding clients' risk profile is extremely important to the success of both the mutual fund sales representative and the client. This chapter has provided much detail about the relatively new field of behavioural finance and its impact on clients' investment behaviour and performance. Clients are susceptible to numerous behavioural biases, and some of the most common ones have been described.

Case Study | "Doctor" Diane: Helping Clients through Their Emotional Traps (*for information purposes only*)

Financial advisor Diane is meeting with her long-time clients, Pierre and Michelle, for an investment portfolio review. Both have substantial Registered Retirement Savings Plan (RRSP) portfolios. They are in their mid-forties, have solid incomes, no children and are on track to pay off their home mortgage by age fifty. They will rely primarily on their RRSPs and eventually other investment savings to fund their retirement. They do not expect to stop working until at least 60 years of age, possibly longer.

During a recent financial market downturn, Diane met with the clients to discuss their RRSP mutual fund portfolios. Both expressed a high degree of fear over their portfolios' negative returns. Diane explained to Michelle and Pierre that while equity markets are volatile and do move through periods of correction from time-to-time, they have historically regained their pre-crisis levels and moved higher overtime, providing investors solid long-term returns.

Michelle, despite her long-term investment time horizon and established medium risk profile, decided that she was unable to sleep at night with the volatility. She directed Diane to cash out her equity-based investments and move them to money market funds. Pierre, while uncertain but worried about losing his nerve, remained in his growth portfolio.

Each year as they reviewed their portfolios together, Dianne was unable to convince Michelle to move back into a more growth-orientated portfolio to help achieve her goals. Despite the sharp bounce back in equity values, she remained convinced that the market would tumble downwards again. Though in obvious discomfort, Pierre refused to adjust his portfolio, choosing to wait until it had regained its pre-crisis level.

At today's meeting, with markets having soared and surpassed their pre-crisis levels, Michelle expresses regret about having missed the turnaround and is now fearful of missing out on further gains. She directs Diane to invest all of her funds into a growth portfolio. Pierre, now feeling emboldened by the increasing value of his portfolio, directs Diane to re-balance into aggressive growth investments.

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Case Study | "Doctor" Diane: Helping Clients through Their Emotional Traps (*for information purposes only*)

Diane, believing that both Michelle and Pierre are reacting emotionally and losing sight of basic investment fundamentals, re-establishes the couple's goals with them, what their required rate of return is to meet their goals, and takes them through the process of determining their risk profiles. Having done so, she helps Michelle by reaching agreement to gradually moving her cash into a balanced investment portfolio; with Pierre, she shows him how, over time, a balanced growth portfolio will help him reach his goals without having to take on the risk he is suggesting. She suggests he establish a small self-directed account to play with 5% of his portfolio as he wishes, keeping the other 95% in a proper portfolio.

COGNITIVE AND EMOTIONAL BIAS

How well do you know the different cognitive and emotional biases? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Define behavioural finance and the most common behavioural biases.
   - Behavioural finance is commonly defined as the application of psychology to understand human behaviour in finance or investing.
   - The theory contends that investors are human beings, rather than rational, logical creatures, and are therefore subject to personal beliefs and biases that may lead to irrational or emotional choices and decisions.
2. Differentiate between cognitive and emotional biases.
   - **Behavioural biases** are defined as systematic errors in financial judgment or imperfections in the perception of economic reality.
   - A **cognitive bias** can be technically defined as basic statistical, information processing or memory errors that are common to all human beings.
   - An **emotional bias** is a mental state that arises spontaneously, rather than through conscious effort.
3. Explain how these biases can be used to better understand client attitudes toward finance and investment decisions.
   - Investors may be better served by adjusting risk and return levels depending upon their behavioural tendencies. This is called a client's best practical allocation.
   - A best practical allocation may slightly underperform over the long term and have lower risk, but is an allocation that the client can comfortably adhere to over the long run.
   - There are two principles for constructing a best practical allocation, in light of client behavioural biases: Moderate biases in less-wealthy clients and adapt to biases in wealthier ones; and moderate cognitive biases and adapt to emotional ones.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 5 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 5 FAQs.

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Tax and Retirement Planning 6

CONTENT AREAS

How Does the Canadian Taxation System Work?

What Are the Main Pension Plans in Canada?

What Are Tax Deferral Plans?

LEARNING OBJECTIVES

1 | Differentiate among the ways that interest income, foreign dividends, Canadian-source dividends and capital gains are taxed.

2 | Identify and describe the features of the government pension plans available to Canadians citizens.

3 | Describe and differentiate between the most common employer-sponsored registered pension plans.

4 | Describe the features of registered retirement savings plans (RRSP) and calculate the annual contribution limit to an RRSP.

5 | List and describe the features of tax-free savings accounts (TFSA).

6 | Describe the features of registered education savings plans (RESPs) and explain how RESPs can be enhanced with Canada Education Savings Grants (CESGs).

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

Canada Education Savings Grants (CESG)

Canada Pension Plan (CPP)

capital gain

capital loss

career average plan

carry forward

contribution in kind

contribution room

deemed disposition

defined benefit plan

defined contribution (money purchase) plan

dividend tax credit (DTC)

earned income

final average plan

fiscal year

flat benefit plan

life annuity

life income fund

Locked-In Retirement Account (LIRA)

locked-in RRSP

marginal tax rate

money purchase plan

Old Age Security (OAS)

over-contribution

Pooled Registered Pension Plan (PRPP)

Québec Pension Plan (QPP)

Registered Education Savings Plan (RESP)

Registered Pension Plan (RPP)

Registered Retirement Income Fund (RRIF)

Registered Retirement Savings Plan (RRSP)

spousal RRSP

Tax-Free Savings Account (TFSA)

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INTRODUCTION

While the Know Your Client rule involves understanding your client's current financial and personal situation, objectives, risk profile, and so on, other important elements must be taken into consideration to come up with relevant investment recommendations to clients. Two of those important elements are the planning of the retirement years and the impact of taxes on investments.

It is important for mutual fund sales representatives to have an excellent understanding of the rules that apply to retirement plans. This chapter explores the details of each type of plan and also looks at some deferred tax plans, such as Registered Retirement Savings Plans (RRSPs), Registered Education Savings Plans (RESPs) and Tax-Free Savings Accounts (TFSAs).

Taxes are a reality of life for Canadians and they affect many personal and investment decisions. Complicating matters is the differential tax rates for income, dividends, and capital gains, not to mention continually changing legislation announced each year in the Federal Budget. The taxation of investment income also affects retirement planning through tax-favoured investments such as RRSPs and TFSAs.

Investors and mutual funds sales representatives must have a working knowledge of the taxation of investment income. This does not mean, however, that you need to become a tax expert. Most mutual funds sales representatives rely on the professional input of accountants and tax experts when a decision on a specific tax matter is needed. It is important nevertheless that you have a clear understanding of how taxes impact returns on investments and what vehicles are available to reduce tax burdens.

HOW DOES THE CANADIAN TAXATION SYSTEM WORK?

This section discusses the fundamentals of taxation in Canada only. Individuals seeking advice or information should seek assistance from the Canada Revenue Agency (CRA, www.canada.ca/en/revenue-agency).

Proper tax planning should be a part of every investor's overall financial strategy. The minimization of tax, however, must not become the sole objective nor can it be allowed to overwhelm the other elements of proper financial management. The investor must keep in mind that it is the after-tax income or return that is important. Choosing an investment based solely on a low tax status does not make sense if the end result is a lower after-tax rate of return than the after-tax rate of return of another investment that is more heavily taxed.

While all investors wish to lighten their individual tax burden, the time and effort spent on tax planning must not outweigh the rewards reaped. Tax planning is an ongoing process with many matters being addressed throughout the year. The best tax advantages are usually gained by planning early and planning often, allowing a reasonable time for the plan to work and to produce the desired results.

While the tax authorities do not condone tax evasion, *tax avoidance* by one or more of the following means is completely legitimate:

- Full utilization of allowable deductions;
- Conversion of non-deductible expenses into tax-deductible expenditures;
- Postponing the receipt of income;
- Splitting income with other family members, when handled properly; and
- Selecting investments that provide a better after-tax rate of return.

Although this discussion will highlight some of the taxation issues that affect taxpayers, none of the suggestions made here should be considered specific recommendations. As tax plays a significant part in the overall financial plan and can affect the choice of investments greatly, every attempt should be made to keep abreast of the ever-changing rules and interpretations.

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THE INCOME TAX SYSTEM IN CANADA

The federal government imposes income taxes by federal statute (the *Income Tax Act*, often referred to as the *ITA*). All Canadian provinces have separate statutes which impose a provincial income tax on residents of the province and on non-residents who conduct business or have a permanent establishment in that province. The federal government collects provincial income taxes for all provinces except two:

- Quebec, which administers its own income tax on both individuals and corporations; and
- Alberta, which administer their own income tax on corporations.

Canada imposes an income tax on world income of its residents as well as certain types of Canadian source income on non-residents. Companies incorporated in Canada under federal or provincial law are usually considered residents of Canada. Also, foreign companies with management and control in Canada are considered residents in Canada and are subject to Canadian taxes.

TAXATION YEAR

All taxpayers must calculate their income and tax on a yearly basis. Individuals use the calendar year while corporations may choose any **fiscal year**, as long as this time period is consistent year over year. No corporate taxation year may be longer than 53 weeks.

CALCULATION OF INCOME TAX

Calculating income tax involves four steps:

- Calculating all sources of income from employment, business and investments
- Making allowable deductions to arrive at taxable income
- Calculating the gross or basic tax payable on taxable income
- Claiming various tax credits, if any, and calculating the net tax payable

Once total income has been determined, there are a number of allowable deductions and exemptions that may be made in calculating taxable income.

TYPES OF INCOME

There are four general types of income. Each is treated differently under Canadian tax laws.

Employment income	Employment income is taxed on a *gross receipt basis*. This means that the taxpayer cannot deduct for tax purposes all the related costs incurred in earning income as a business does. However, employees are permitted to deduct a few employment-related expenses such as pension contributions, union dues, childcare expenses and other minor items.
Capital property income	Includes assets purchased solely for investment purposes, such as stocks, bonds, and mutual funds. The income from these investments – dividends and interest for example – is considered income from capital property.
Business income	Business income arises from the profit earned from producing and selling goods or rendering services. Self-employment income falls in this category. Business income is taxed on a *net-income basis*.

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Capital gains and losses	A **capital gain** or **capital loss** is the gain or loss resulting from the sale of capital property. A capital gain occurs when the property is sold at a price higher than its original cost (or lower than its cost in the case of a capital loss). Costs of the sale or disposition are also included in arriving at a capital gain or capital loss.

CALCULATING INCOME TAX PAYABLE

Basic tax rates are applied to taxable income. Rates of federal tax applicable to individuals in 2024 (excluding tax credits) are as follows:

Table 6.1 | Federal Income Tax Rates for 2024 – (*For information purposes only*)

Taxable Income:	Tax
• On the portion of taxable income that is $55,867 or less	15%
• On the portion of taxable income over $55,567 and up to $111,733	20.5%
• On the portion of taxable income over $111,733 and up to $173,205	26%
• On the portion of taxable income over $173,205 and up to $246,752	29%
• On the portion of taxable income over $246,752	33%

Source: Canada Revenue Agency

Note: The Canada Revenue Agency website (www.canada.ca/en/revenue-agency) should be consulted for current tax-related information.

Currently, all provinces levy their own tax on taxable income. Provincial amounts are calculated in essentially the same way as federal tax.

Adding the provincial rate to the federal rate gives the taxpayer's combined marginal tax rate. The **marginal tax rate** is the tax rate that would have to be paid on any additional dollars of taxable income earned.

Given an investor's marginal tax rate, the tax consequences of certain investment decisions can be estimated. In this way, an advisor can respond to a client's need to minimize taxes and select securities for the portfolio that offer the investor a higher after-tax rate of return.

TAXATION OF INVESTMENT INCOME

As long as the investment is held in a registered plan (discussed later in this chapter), tax does not apply on revenues generated by the investment. However, for investments not held in registered plans taxpayers are required to report income on an annual basis. There are three different forms of revenues that can be generated from mutual funds and each of them are taxed differently:

- Interest income is generated by the fixed-income securities held in the mutual fund;
- Dividends are generated by the preferred shares and some common shares held in the mutual fund;
- Capital gains are generated when the mutual fund and/or a security held in the mutual fund is sold for more than its cost (i.e., the selling price is higher than the cost price).

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INTEREST INCOME

Taxpayers are required to report interest income (from such investments as CSBs, GICs and bonds) on an annual accrual basis, regardless of whether or not the cash is actually received. Interest income is taxed as regular income and is not subject to any preferential tax treatment.

DIVIDENDS FROM TAXABLE CANADIAN CORPORATIONS

Individual taxpayers receive preferential tax treatment on dividends received from Canadian corporations. The preferential treatment reflects the fact that corporations pay dividends from after-tax income—i.e., from their profits. The amount included in a taxpayer's income is 'grossed-up' to equal approximately what the corporation would have earned before tax. The taxpayer then receives a tax credit that offsets the amount of tax the corporation paid.

FOR INFORMATION PURPOSES ONLY

There are two types of dividend tax credits available to Canadian corporations—one for privately-held and one for publicly-traded corporations. We discuss the dividend tax credit available to most Canadian publicly traded companies in this course.

Eligible Canadian dividends are grossed-up by 38% to arrive at the *taxable amount of the dividend* and then the taxpayer receives a federal **dividend tax credit** (DTC) of 15.02% on this amount. Dividend tax credits are also available at varying provincial levels.

EXAMPLE

An individual receives a $300 eligible dividend from a Canadian corporation. The individual would report $414 ($300 × 38% plus $300 or 138% of $300) in net income for tax purposes. The additional $114 is referred to as the gross up and the $414 is the taxable amount of the dividend.

The taxpayer calculates net income using the $414 amount, and can then claim a federal dividend tax credit in the amount of 15.02% of the taxable amount of the dividend, which is $62.18 in this example (15.02% × $414).

If the individual is taxed at 26%, the tax payable on the taxable amount of the dividend is $107.64 ($414 × 26%) and the net tax payable is $45.46 ($107.64 – $62.18).

CAPITAL GAIN

Capital gains are also subject to a preferential tax treatment. In fact, only 50% of the capital gain is taxable.

EXAMPLE

An individual receives a $300 capital gain. The individual would report $150 ($300 × 50%) in net income for tax purposes.

The taxpayer calculates net income using the $150 amount and pays tax only on this amount.

If the individual is taxed at 26%, the tax payable on the capital gain is $39 ($300 × 50% × 26%, or $150 × 26%).

DIVIDENDS FROM FOREIGN CORPORATIONS

Foreign dividends are generally taxed as regular income, in much the same way as interest income. Individuals who receive dividends from non-Canadian sources usually receive a net amount from these sources, as non-resident withholding taxes are applied by the foreign dividend source. Such investors may be able to use foreign tax credits

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to offset the Canadian income tax otherwise payable. The allowable credit is essentially the lesser of the foreign tax paid or the Canadian tax payable on the foreign income, subject to certain adjustments. Details on what foreign tax is allowed as a deduction are available from the CRA.

When mutual funds are held outside a registered plan (discussed later in this chapter), the unitholder is sent a T3 form or a T5 form by the fund. This form reports the types of income distributed that year – foreign income and Canadian interest, dividends and capital gains, including dividends that have been reinvested. Each is taxed at the fund holder's personal rate in the year received.

MINIMIZING TAXABLE INVESTMENT INCOME

Dividends from taxable Canadian corporations (but not foreign corporations) are subject to less tax than interest income. Accordingly, a shift from interest-bearing investments into dividend-paying Canadian stocks may reduce taxes and improve after-tax yield.

Depending on the tax rate, the tax on Canadian dividends can be higher or lower than the tax payable on capital gains. This is illustrated in Tables 6.2 and 6.3. At a marginal federal tax rate of 29%, federal taxes owed on capital gains are lower than tax owed on the same amount of Canadian dividends. But at a marginal tax rate of 15%, the taxes owed on dividends is nil compared to taxes owing on the same amount of capital gains. In both cases, there is a substantial difference between the tax owed on interest and the tax owed on capital gains and dividends.

Table 6.2 | Comparison of Tax Consequences of Investment Income in a 29% Marginal Tax Bracket

	Interest Income	Canadian Dividend Income	Capital Gains Income
Income Received	$1,000.00	$1,000.00	$1,000.00
Taxable Income	$1,000.00	$1,380.00 (Grossed up by 38%)	$500.00 (50% of $1,000)
Federal Tax (29% of taxable income)	$290.00	$400.20	$145.00
Less Dividend Tax Credit (15.02%)	–	$207.28	–
Federal Tax Owed	**$290.00**	**$192.92**	**$145.00**

Table 6.3 | Comparison of Tax Consequences of Investment Income in a 15% Marginal Tax Bracket

	Interest Income	Canadian Dividend Income	Capital Gains Income
Income Received	$1,000.00	$1,000.00	$1,000.00
Taxable Income	$1,000.00	$1,380.00 (Grossed up by 38%)	$500.00 (50% of $1,000)
Federal Tax (15% of taxable income)	$150.00	$207.00	$75.00
Less Dividend Tax Credit (15.02%)	–	$207.28	–
Federal Tax Owed	**$150.00**	**$0.00**	**$75.00**

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Case study | Taxed by Tax: Ted and Justine (*for information purposes only*)

Financial advisor John is meeting with his clients, Ted and Justine, to review their portfolios. It's early May, and the couple has just filed their taxes for the previous year. Ted makes a mid-six-figure income from his job, while Justine has taken a career hiatus and is a stay-at-home mom to the couple's two young children. At the meeting, Ted expresses to John his frustration over the sizable tax bill he has just had to pay, a substantial portion of which was because of investment income. Justine, on the other hand, received a refund. Ted has a substantial RRSP portfolio, while Justine's is relatively modest. They have a substantial emergency cash reserve in GICs and money market funds.

John examined the couple's holdings in preparation for the meeting. First, he assures the clients that they are wisely taking advantage of RRSPs to build their retirement income savings. He explains that they are benefitting by receiving the tax deduction benefits today based on their contributions, while also sheltering their savings and benefitting from long-term tax-deferred compounding to grow their investments faster.

As for the children's education needs, the couple is taking advantage of the tax-deferred compounding of RESPs, along with the added benefit of generating the maximum CESG each year. While the income will be taxed upon withdrawal, they will be taxed in the beneficiary's hands, not those of Ted and Justine.

John identifies a few opportunities for the couple to save on taxes. Ted is paying taxes on investment income from his employer-sponsored share purchase plan. As a listed company, his firm's shares are paying dividends, which, while tax-advantaged by the Dividend Tax Credit, are still increasing Ted's taxable income. Ted also sold some shares to pay for a new extension on the couple's house, which generated a substantial capital gain. John suggests that Ted move his shares into a TFSA to shelter the dividend income and future capital gains and switch the share purchase plan to be TFSA sheltered.

In future, any expenses should be funded by cash on hand, avoiding capital gains on the sale of existing non-sheltered share holdings. Also, any excess cash on hand should be sheltered in the couple's TFSAs to avoid the top-marginally taxed interest income they are generating.

Ted is expecting a pension income from his company's defined benefit plan. John recommends that Ted should maximize his RRSP contributions, as he has a high-level of income. However, for long-term planning purposes, John suggests that Ted contribute to a spousal RRSP for Justine. While it will not result in an immediate tax reduction, when the two retire, it will work to even out their retirement incomes and reduce the amount of tax that Ted would otherwise have paid.

TAX-DEDUCTIBLE ITEMS RELATED TO INVESTMENT INCOME

CARRYING CHARGES

Tax rules permit individuals to deduct certain carrying charges for tax purposes. Acceptable carrying charge deductions include:

- Interest paid on funds borrowed to earn investment income such as interest and dividends.
- Fees for certain investment advice.
- Fees paid for management, administration, or safe custody of investments.
- Accounting fees paid for the recording of investment income.

The following charges cannot be deducted from investment income:

- Interest paid on funds borrowed to buy investments that can generate capital gains only.
- Brokerage fees or commissions paid to buy or sell securities. Instead, these fees or commissions affect the cost base of the investment.

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- Interest paid on funds borrowed to contribute to a registered retirement savings plan, a registered education savings plan, a registered disability savings plan, or a tax-free savings account (TFSA).
- Administration, counselling and trustee fees for regular or self-directed registered retirement savings plan or registered retirement income fund.
- Fees paid for advice such as financial planning.
- Safety deposit box charges.

BORROWED FUNDS

A taxpayer may deduct the interest paid on funds borrowed to purchase securities if:

- The taxpayer has a legal obligation to pay the interest
- The purpose of borrowing the funds is to earn income
- The income produced from the securities purchased with the borrowed funds is not tax exempt

If the interest earned on a fixed-income debt security is greater than the rate paid to borrow the funds used to purchase the security, the interest amount paid for the borrowed funds is generally deductible. However, in the case of convertible debentures, normally all carrying charges are deductible since the debentures may be converted into common shares which could theoretically pay unlimited dividends.

WHAT ARE THE MAIN PENSION PLANS IN CANADA?

There are two main types of pension plans in Canada: Government pension plans and Employer-Sponsored plans. Government pension plans include the Canada and Québec pension plans and Old Age Security. In an Employer-Sponsored Plan, both the employer and the employee make regular contributions into an account on behalf of the employee. The individual may begin to make Government and Employer Sponsored plan withdrawals only after retirement.

GOVERNMENT PENSION PLANS

Every resident in Canada earning income from employment or self-employment is required to contribute to one of two government-sponsored pension plans, depending on their province of residence. Residents of all provinces except Quebec contribute to the **Canada Pension Plan** (CPP) and residents of Quebec contribute to the **Québec Pension Plan** (QPP). Contributions to CPP or QPP are automatic and the right to a pension based on years of contribution is irrevocable and is paid out even if the contributor leaves Canada.

CPP and QPP contributors may choose to receive a monthly retirement pension for life beginning at the age of 65. You can also apply to receive your pension starting at age 60, but the amount received is reduced by a certain percentage for each month by which you are under the age of 65. You can also postpone receiving your pension until age 70. In this case, the amount of the monthly pension is increased by a certain percentage for each month by which you are over the age of 65.

EXAMPLE

Bill has just turned 60 years old and has retired. He chooses to receive his CPP payments early. For purposes of this example, his pension payments would have been $500 a month at age 65 but he will receive $320 a month instead.

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For many retirees, the CPP or QPP amount must be supplemented with other retirement savings. For this reason, Canadians are encouraged to provide for their retirement needs by saving throughout their working years, joining a company pension plan and contributing to a retirement savings plan, such as a registered retirement savings plan (RRSP).

In addition to the CPP and QPP, the **Old Age Security** (OAS) pension is payable to all Canadian citizens and legal residents who have reached a minimum age.

Pensioners qualify for a full pension if they were:

- Resident in Canada for at least 40 years after reaching the age of 18; and
- Resident in Canada for an uninterrupted 10 years immediately preceding application for an OAS pension.

If OAS candidates did not live in Canada for the last 10 years, they could still qualify for a full pension if:

- They lived in Canada for the full year immediately before the application was approved; and
- They lived or were present in Canada for at least three years for each year of absence during that 10-year period.

Starting in July 2022, when an OAS pensioner reaches age 75, their OAS entitlement increases by 10%.

Since OAS benefits are not paid until application has been made and approved by the federal government, applicants for the OAS pension should apply six months prior to eligibility. Proof of age and legal residence status are required. Pension benefit payments normally begin in the month following the month the applicant meets the age and residence requirements. In cases of late application, payments may be made retroactively for up to 12 months.

A provision exists in the *Income Tax Act* (ITA) for higher-income Canadians to repay all or part of the social benefits they receive in any year. This repayment is referred to as a "clawback", and OAS payments are a social benefit that falls into this category.

EXAMPLE

For the 2024 income year, the clawback level starts at an income threshold of $90,997. Repayment is based on the difference between your income and the threshold amount for the year. You must pay back 15% of every dollar above this threshold. Additionally, the government sets a maximum income level for receiving OAS benefits. If an OAS recipient between the age of 65 and 74 has a net income of approximately $148,065, then all OAS benefits are paid back. For individuals age 75 and older, the maximum income level for receiving OAS benefits is almost 4% higher.

EMPLOYER-SPONSORED PLANS

Employer-sponsored plans are called registered pension plans (RPPs) and include both defined benefit and defined contribution plans. The employer's role in contributing to these plans distinguishes them from both government pension plans and registered retirement savings plans (RRSPs).

A **registered pension plan** (RPP) is a trust, registered with Canada Revenue Agency (CRA) or the appropriate provincial agency, established by a company to provide pension benefits for its employees when they retire. Both employer and employee contributions to the plan are tax-deductible.

Two types of RPPs are **defined benefit plans** (DBP) and **defined contribution plans** (DCP). In a DBP the benefits are predetermined based on a formula including years of service, income level and other variables, and the contributions are designed to match the predetermined plan benefits. In a DCP (also known as a **money purchase plan**) the contributions to the plan are predetermined and the benefits, at retirement, will depend on how the contributions were invested.

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DEFINED BENEFIT PLANS

In a defined benefit plan, you know in advance how much your pension will be at retirement. Three types of defined benefit plans are:

- flat benefit plans
- career average plans
- final average plans

These plans differ only in the criteria chosen to calculate benefits.

FLAT BENEFIT PLANS

The **flat benefit plan** is the simplest type of defined benefit plan. The monthly pension is a specified dollar amount of pension for each year of service. Thus, a formula of $15 per month per year of service, after 30 years of service, would produce a pension of $450 per month ($15 × 30 years). This type of pension is common among unionized employees where wage levels are generally uniform. Figure 6.1 summarizes the advantages and disadvantages of flat benefit plans.

Figure 6.1 | Evaluating Flat Benefit Plans

Advantages	• The plan is normally funded entirely by the employer. • The level of benefits usually increases as a result of ongoing employee-employer negotiations. • The plan's formula is easy to understand. • A flat benefit pension paid is in addition to OAS and CPP/QPP benefits.
Disadvantages	• The flat benefit plan does not differentiate among the earnings levels of plan participants. • The pension amount must be continually renegotiated to keep pace with inflation.

The flat dollar pension amount paid by the plan is established in terms of today's dollar values. If the pension amount is not regularly increased by negotiation, then the pension payable at retirement could be insufficient due to inflation.

EXAMPLE

Jennifer participates in a flat benefit pension plan that provides her with a flat benefit of $25 per month per year of service. What will be Jennifer's monthly pension when she retires after she has worked 30 years for her employer?

Jennifer's total pension at retirement will be $750 per month ($25 × 30).

CAREER AVERAGE PLANS

For **career average plans**, the pension is calculated as a percentage of an employee's earnings over the course of her career (while in the plan). Employees may contribute a fixed percentage of their salary (such as 5%) to this type of plan. Employer contributions required to fund the defined benefit are not fixed: they vary according to factors such as investment yield, mortality and employee turnover.

For example, an employee may accumulate a career average pension of 2% of averaged annualized salary (before deductions) for each year of service while in the plan. If the employee has 30 years of service and average monthly earnings of $1,000 over the 30 years, then the pension payable at retirement would be $600 per month (2% × $1,000 × 30 years).

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Figure 6.2 | Evaluating Career Average Plans

Advantages	• Career average plans are easily integrated with CPP/QPP benefits by providing a lower percentage of benefit on earnings up to the average maximum under the CPP/QPP plan and a higher percentage on earnings over the maximum. • The career average plan gives equal weight to the employee's earnings throughout his or her service. • Many companies update career average plan benefits by updating the base year in the pension formula. For example, if the base year is moved forward to 2021, all service prior to 2021 will be based on 2021 earnings instead of the actual salary received when the service was performed.
Disadvantages	• Similar to the flat benefit plan, the pension payable at retirement may be eroded by inflation if regular updates to the plan are not made.

EXAMPLE

Andrew decides to retire after 30 years of employment with the same employer. He participated in a career average pension plan with a defined benefit percentage of 2%. Andrew's averaged annual salary (before deductions) was $48,000 over his 30-year career with his employer.

Andrew's earned pension will be $28,800 per year ($48,000 × 2% × 30), or $2,400 per month.

FINAL AVERAGE PLANS

Similar to a career plan, a **final average plan** bases the pension on an employee's length of service and average earnings. Rather than basing the earnings over the lifetime of service, however, final average plans use a stated period of time. Often this is the average of the best five consecutive years of earnings in the last 10 years of employment, or the average of the best three consecutive years of earnings over the last five years of employment.

Using the best average years is preferred to using the last few years, in case earnings experience a drop close to retirement. Employees often contribute a percentage of their salary to final average plans. Again, employer costs are variable.

Figure 6.3 | Evaluating Final Average Plans

Advantages	• Final average plans are easily integrated with CPP/QPP benefits. • By providing a pension based on earnings near retirement, these plans provide better protection against inflation at least up to retirement. • Final average pension plans usually pay a higher pension than a career average plan.
Disadvantages	• If the contributor's earnings decline as retirement approaches, then a lower pension payment may result.

EXAMPLE

Chris worked for 30 years with the same employer that offered a final average pension plan. Over the last five years, his best three years of income were: $52,000, $54,000 and $56,000, for a 3-year average of $54,000. His pension formula is 1.5% of final average earnings.

What pension amount will Chris receive at retirement?

His earned pension will be $24,300 per year ($54,000 × 1.5% × 30), or $2,025 per month.

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For defined benefit plans, the full benefit may only be available to those who have achieved a minimum level of service, such as 25 years. Depending on the plan, employees who leave their employer before the minimum level of service may receive a lump sum that is usually transferred into what is a called a **locked-in retirement account** or LIRA. Amounts transferred into a LIRA are locked-in and cannot be withdrawn; they can only be used for retirement income.

DEFINED CONTRIBUTION PLANS

In defined contribution plans, the employer contributes a fixed percentage based on the employee's annual earnings. Often, the employees contribute a percentage of their salary, and the company matches it. Pension income is based on the amount of money a plan member has in his or her individual account at retirement. This amount will vary depending on the amount contributed and the investment return over the life of the plan.

The pension at retirement is whatever amount the contributions, plus interest, will purchase, often in the form of an annuity.

Figure 6.4 | Evaluating Defined Contribution Plans

Advantages	• Popular with small employers as it is easy to understand, easy to administer and has fixed annual costs. • The regulations surrounding these plans are not as onerous as those for defined benefit plans. • Employees can usually direct the funds to their choice of investment vehicles.
Disadvantages	• The final pension amount is unknown until retirement. • The final pension may be smaller than expected if the investment performance has been poor. • Members retiring under similar circumstances may receive substantially different pensions depending on investment return over the life of the plan.

The combined employer/employee contributions to a defined contribution pension plan cannot exceed the *lesser* of the following amounts:

- 18% of an employee's current year compensation; and
- The defined contribution limit for the year, which is $32,490 in 2024 (the contribution limit is indexed annually to inflation).

WHAT ARE TAX DEFERRAL PLANS?

The principle of tax deferral plans is to encourage Canadians to save for retirement by enabling them to reduce taxes paid during high earning (and high taxpaying) years. Tax payment is deferred until retirement years when income and tax rates are normally lower. The most common tax deferral vehicles are explained below.

REGISTERED RETIREMENT SAVINGS PLANS (RRSPs)

Registered Retirement Savings Plans (RRSPs) are available to individuals to defer tax and save for retirement years. Annual contributions are tax-deductible up to allowable limits. Income earned in the plan accumulates tax-free as long as it remains in the plan.

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Essentially there are two types of RRSPs: Single Vendor RRSPs and Self-Directed RRSPs. There are no limits as to the number of plans a person can hold. Funds can be transferred tax-free from plan to plan if the taxpayer/investor so desires. This is accomplished by completing a transfer document with the trustee of the new plan. The documents are then forwarded to the original plan's trustee.

Single Vendor Plans	In these plans, the holder invests in one or more of a variety of GICs, segregated pooled funds or mutual funds. The investments are held in trust under the plan by a particular issuer, bank, insurance company, credit union or trust company. To qualify as acceptable investments for an RRSP (either Single Vendor or Self-Directed), pooled funds must be registered with the CRA. In Single Vendor RRSPs, no day-to-day investment decisions are required to be made by the holder. There may be a trustee fee charged for this type of plan in addition to any costs incurred for purchasing the investments themselves.
Self-Directed Plans	In these, holders invest funds or contribute certain acceptable assets such as securities directly into a registered plan. The plans are usually administered for a fee by a Canadian financial services company. One advantage of Self-Directed RRSPs is that investors can make all investment decisions. Another advantage is that, while there are rules with respect to allowable content, a full range of securities may be held in these plans, including GICs, money market instruments, bonds, equities and mutual funds. Investors may also hold direct foreign investments in these RRSPs.

There are special features that the investor should understand about an RRSP account. First, an RRSP is a trust account designed to benefit the owner at retirement. Withdrawals from an RRSP are subject to a graduated withholding tax and such withdrawals must be included in income in the year withdrawn. More tax may be payable at year-end, depending on the income level of the taxpayer. Second, an RRSP cannot be used as collateral for loan purposes.

CONTRIBUTIONS TO AN RRSP

There is no limit to the number of RRSPs an individual may own. However, there is a restriction on the amount that may be contributed to RRSPs on a per-year basis. The maximum annual tax-deductible contributions to RRSPs an individual can make is the lesser of:

- 18% of the previous year's earned income; and
- The RRSP dollar limit for the year.

From the lesser of the above two amounts:

- Deduct the previous year's Pension Adjustment (PA) and the current year's Past Service Pension Adjustment (PSPA). (Note: the PA and PSPA are a result of being part of an employer-sponsored RPP. The PA and PSPA are reported by the plan member's administrator. The PA and PSPA reduces the amount an individual can contribute to a RRSP to ensure the maximum annual contribution on all pension and tax deferral plans combined is not exceeded.)
- Add the taxpayer's unused RRSP **contribution room** at the end of the immediately preceding taxation year.

The RRSP dollar contribution limit is $31,560 for the 2024 taxation year. The limit is indexed to inflation each year. The contributions must be made in the taxation year or within 60 days after the end of that year to be deductible in that year.

Individuals can **carry forward** unused contribution limits indefinitely.

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Earned income for the purpose of RRSP contributions may be simply defined as the total of:

- Total employment income (less any union or professional dues)
- Net rental income and net income from self-employment
- Royalties from a published work or invention and research grants
- Some alimony or maintenance payments ordered by a court
- Disability payments from CPP or QPP
- Supplementary Employment Insurance Benefits (SEIB), such as top-up payments made by the employer to an employee who is temporarily unable to work (for parental or adoption leave, for example), but not the Employment Insurance (EI) benefits paid by Human Resources and Social Development Canada

Plan holders who make contributions to RRSPs in excess of the amount permitted by legislation may be subject to a penalty tax. **Over-contributions** of up to $2,000 may be made without penalty. A penalty tax of 1% per month is imposed on any portion of over-contribution that exceeds $2,000.

A plan holder may contribute securities already owned to an RRSP. According to the CRA, this contribution is considered to be a **deemed disposition** at the time the contribution is made. Consequently, in order to calculate the capital gain or loss, the plan holder must use the fair market value of the securities (the fair market value is the price at which the property would sell for on the open market) at the time of contribution as the proceeds from disposition. Any resulting capital gain is included in income tax for the year of contribution. Any capital loss is deemed to be nil for tax purposes. This type of contribution is called a **contribution in kind**.

EXAMPLE

Mr. Wu bought 100 mutual fund units of Growth Fund Inc. at a price of $10 for a total value of $1,000. Two years later, the units have increased in value to $20 per share.

Mr. Wu decides to contribute the units to his self-directed RRSP when the net asset value of the units is $20.

- The contribution to the RRSP would be the net asset value of the fund. So, the contribution would be $2,000 to his RRSP. His RRSP would now hold the units.
- Because Mr. Wu had an accrued capital gain of $1,000 ($2,000 net asset value – $1,000 cost = $1,000 gain), he must include that capital gain in his taxes for the year, even though he still owns the units.

SPOUSAL RRSPS

A taxpayer may contribute to a **spousal RRSP**, which is an RRSP registered in the name of a spouse or common-law spouse, and still claim a tax deduction. If the taxpayer is also a plan holder, he or she may contribute to the spouse's plan only to the extent that the contributor does not use the maximum contribution available for his or her own plan.

EXAMPLE

Sofie and Nigel are married and contribute to RRSPs. Sofie has a maximum contribution limit of $11,500 for her own RRSP, but contributes only $10,000, she may contribute $1,500 to Nigel's spousal RRSP. Nigel's RRSP contribution limits are not affected by the spousal RRSP, which is a separate plan. (Therefore, Nigel, in this example, would have two plans: one for personal contributions and one for contributions made by Sofie *on his behalf*.)

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Unless converted to a Registered Retirement Income Fund (RRIF) or used to purchase certain acceptable annuities, the withdrawal from a spousal plan is taxable income to the spouse – not the contributor – since the spousal RRSP belongs to the spouse in whose name it is registered. However, any withdrawals of contributions to a spousal plan claimed as a tax deduction by a contributing spouse made:

- In the year the contribution is made, or
- In the two calendar years prior to the year of withdrawal, are taxable to the contributor in the year of withdrawal rather than to the plan holder.

  Example: In each of six consecutive years, a husband contributes $1,000 to his wife's RRSP, which he claims as tax deductions. In the seventh year there are no contributions, and the wife de-registers the plan. Thus, for the seventh taxation year:

- The husband includes as taxable income in his tax return the sum of $2,000 (contributions: 7th year – nil; 6th year – $1,000; 5th year – $1,000); and
- The wife includes as taxable income in her tax return the sum of $4,000 (i.e., contributions to the plan made in years 1, 2, 3 and 4) plus all earnings that accumulated on the total contributions of $6,000 in the plan.

OTHER TYPES OF CONTRIBUTIONS

Some pension income can be transferred directly to RRSPs. The following transfers can be contributed without affecting the regular tax-deductible contribution limits outlined elsewhere:

- Lump sum transfers from RPPs and other RRSPs, if transferred to the individual's RRSP on a direct basis, are not included in income and no deduction arises.
- Allowances for long service upon retirement often known as retiring allowances, for each year of service, under very specific guidelines.

TERMINATION OF RRSPs

An RRSP holder may make withdrawals or de-register the plan at any time, but mandatory de-registration of an RRSP is required during the calendar year when an RRSP plan holder reaches age 71.

The following maturity options are available to the plan holder in the year he or she turns 71:

- Withdraw the proceeds as a lump sum payment which is fully taxable in the year of receipt;
- Use the proceeds to purchase a life annuity;
- Use the proceeds to purchase a fixed term annuity which provides benefits to a specified age;
- Transfer the proceeds to a Registered Retirement Income Fund (RRIF) which provides an annual income; or
- A combination of the above.

RRIFs, fixed-term annuities and life annuities, available from financial institutions which offer RRSPs, permit the taxpayer to defer taxation of the proceeds from de-registered RRSPs. Tax is paid only on the annual income received each year.

Should the annuitant die, benefits can be transferred to the annuitant's spouse. Otherwise, the value of any remaining benefits must be included in the deceased's income in the year of death. Under certain conditions, the remaining benefits may be taxed in the hands of a financially dependent child or grandchild, if named as beneficiary. The child or grandchild may be entitled to transfer the benefits received to an eligible annuity, an RRSP or an RRIF.

If a person dies before de-registration of an RRSP, the surviving spouse may transfer the plan proceeds tax-free into his or her own RRSP as long as the spouse is the beneficiary of the plan. If there is no surviving spouse or dependent child, the proceeds from the plan are taxed in the deceased's income in the year of death.

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ADVANTAGES OF RRSPs

The following are some of the advantages provided by RRSPs:

- A reduction in annual taxable income during high taxation years through annual tax-deductible contributions;
- Shelter of certain lump sum types of income from taxation through tax-free transfer into an RRSP;
- Accumulation of funds for retirement, or some future time, with the funds compounding earnings on a tax-free basis until withdrawal;
- Deferral of income taxes until later years when the holder is presumably in a lower tax bracket;
- Opportunity to split retirement income (using spousal RRSPs) which could result in a lower taxation of the combined income and the opportunity to claim two, $2,000 pension tax credits.

DISADVANTAGES OF RRSPs

The following are some of the disadvantages provided by RRSPs:

- If funds are withdrawn from an RRSP, the plan holder pays income tax (not capital gains tax) on the proceeds withdrawn;
- The RRSP holder cannot take advantage of the dividend tax credit on eligible shares that are part of an RRSP;
- If the plan holder dies, all payments out of the RRSP to the plan holder's estate are subject to tax as income of the deceased, unless they are to be received by the spouse or, under certain circumstances, a dependent child or grandchild;
- The assets of an RRSP cannot be used as collateral for a loan.

JOHN AND BETTY'S RRSP DECISIONS

Can you help John and Betty with the potential consequences of their RRSP decisions? *Complete the online learning activity to assess your knowledge.*

REGISTERED RETIREMENT INCOME FUNDS (RRIFS)

As explained previously, a **registered retirement income fund** (RRIF) is one of the tax deferral vehicles available to RRSP holders who wish to continue the tax sheltering of their plans. The plan holder transfers the RRSP funds into a RRIF. Each year (beginning with the year following acquisition of the RRIF) the plan holder must withdraw and pay income tax on a fraction of the total assets in the fund, the "annual minimum amount." The assets are composed of capital plus accumulated earnings. The annual amount is determined by a table designed to provide benefits to the holder until death. The term of the RRIF may be based on the age of the holder's spouse (if younger) instead of the plan holder's own age to extend the term and reduce the amount of the required withdrawal.

While there is a minimum amount that must be withdrawn each year, there is no maximum amount.

Before the RRIF holder reaches age 71, the annual minimum amount that must be withdrawn is a percentage based on the person's age. The percentage is calculated as follows: 1 ÷ (90 – age). At age 71, plans use a percentage prescribed by CRA. The RRIF withdrawal factor at age 71 is 5.28% and increases until age 95, when it is set at 20%.

A taxpayer can own more than one RRIF. Like a RRSP, a RRIF may be self-directed by the holder through instructions to the financial institution holding the RRIF, or it may be managed. A wide variety of qualified investment vehicles within the Canadian content framework are available for self-directed plans including stocks, bonds, investment certificates, mutual funds and mortgages.

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LOCKED-IN RETIREMENT ACCOUNTS

As a general rule, vested funds from a registered pension plan are not available to the employee prior to retirement. However, from time to time, registered plans are terminated, or employees leave an employer to work elsewhere. In such cases, registered pension plan funds may be transferred into a **locked-in RRSP**. This type of RRSP differs from the standard RRSP in that the holder of a locked-in plan cannot withdraw any of the money until the holder reaches a particular age, depending on the province of residence and the provisions of the plan. At that time, termination options are generally limited to a **Life Income Fund** (LIF) or a Life Annuity. (Saskatchewan residents have access to a Prescribed Registered Retirement Income Fund instead of a LIF.)

LIFs are similar to RRIFs in that they both have minimum annual withdrawal requirements. LIFs also have maximum annual withdrawals limits. A **life annuity**, on the other hand, is an insurance product that features a predetermined periodic payout amount until the death of the retiree. These products are most frequently used to help retirees budget their money after retirement. Typically, an individual pays into the annuity on a periodic basis while he or she is still working or buys the annuity in one large purchase. When the person retires, the annuity makes periodic (usually monthly) payouts. When a triggering event (such as death) occurs, the periodic payments from the annuity usually cease.

TAX-FREE SAVINGS ACCOUNTS (TFSA)

The **Tax-Free Savings Account** (TFSA) is an entirely new kind of savings vehicle. Since coming into existence at the start of 2009, TFSAs have been welcomed by commentators as the most exciting financial planning and wealth management tool for individual Canadians since RRSPs were introduced in 1957. That's primarily because income earned within a TFSA will not be taxed in any way throughout an individual's lifetime. In addition, there are no restrictions on the timing or amount of withdrawals from a TFSA, and the money withdrawn can be used for any purpose.

BASIC RULES

Any resident of Canada who is at least 18 years of age can open a TFSA. You don't have to have earned any income in the preceding or current year to be able to contribute to a TFSA. The money you contribute can come from a tax refund, a bequest, savings, a gift, or earnings from employment or business. Whenever you don't make the full annual contribution, you can carry forward that "contribution room" and use it any time in the future.

Table 6.4 shows the TFSA annual contribution limit per year since its inception.

Table 6.4 | Tax-Free Savings Account Annual Contribution Limit 2009–2024

	TFSA Annual Contribution limit
2009 to 2012	$5,000
2013 and 2014	$5,500
2015	$10,000
2016 through 2018	$5,500
2019 through 2022	$6,000
2023	$6,500
2024	$7,000
Total	**$95,500**

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TAXES

While the money contributed to a TFSA is not tax-deductible, there is no tax payable on the income earned in the TFSA – whether it be interest, dividends or capital gains.

QUALIFIED INVESTMENTS

Individuals can invest the amounts in a TFSA in a wide variety of products such as GICs, savings accounts, stocks, bonds or mutual funds. The kinds of investments you can put in a TFSA are basically the same as the ones you can put in an RRSP. These are called "qualified investments."

CONTRIBUTIONS

Your contribution room every year consists of the TFSA dollar limit for that year plus any withdrawals you made in the preceding year, along with any unused contribution room. Based on information provided by the issuer, the Canada Revenue Agency (CRA) will determine the TFSA contribution room for each eligible individual. Your current contribution room is available online or by phone with the CRA. If you contribute more than your contribution room allows, you will be taxed at the rate of 1% of the excess contribution every month.

WITHDRAWALS

Withdrawals can be made from a TFSA at any time. There is no limit to how much may be withdrawn and there is no penalty or tax on withdrawals. If you wish, you can later replace/re-contribute the money you have withdrawn, but you don't have to. If you have unused TFSA contribution room, you could replace/re-contribute the amount you withdrew in the same calendar year (up to the amount of unused TFSA contribution room available). If you do not have unused TFSA contribution room then you must wait until the next calendar year to replace/re-contribute the amount you withdrew. If you do want to replace/re-contribute the money you withdrew, there's no deadline for doing so.

A TFSA is a versatile and user-friendly type of account that makes it appealing to save, because the income earned in the account is never taxed, there is a lot of flexibility in making contributions and withdrawals and all residents over the age of 18 can set one up.

Because the rules let you withdraw money and then replace/re-contribute it (in a future calendar year if you currently do not have unused TFSA contribution room) without being taxed, a TFSA is a good way to save for a variety of expenditures at different stages of a person's life: tuition fees, repayment of student loans, a wedding, a holiday, a new car, a house, or even increasing the value of the estate you leave to your heirs. Basically, a TFSA can benefit you through your entire adult life cycle. Also, you could put aside the maximum yearly contribution as an emergency fund.

REGISTERED EDUCATION SAVINGS PLANS (RESPS)

Registered Education Savings Plans (RESPs) are tax-deferred savings plans intended to help pay for the post-secondary education of a beneficiary. Although contributions to a plan are not tax-deductible, there is a tax-deferral opportunity since the income accumulates tax-deferred within the plan. On withdrawal, the portion of the payments that were not original capital will be taxable in the hands of the beneficiary or beneficiaries, provided that they are enrolled in qualifying or specified educational programs. The assumption is that, at the time of withdrawal, the beneficiaries or beneficiary would be in a lower tax bracket than the contributor. Consequently, withdrawals from the plan should be taxed at a lower rate.

There is no maximum amount that can be contributed in a single calendar year for each beneficiary. However, there is a lifetime maximum contribution of $50,000 per beneficiary. Contributions can be made for up to 31 years, but the plan must be collapsed within 35 years of its starting date. This time limitation requires contributors to decide when would be the best time to start the plan.

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There are two types of RESPs, pooled plans and self-directed plans. As their name suggests, pooled or group plans are plans to which a number of subscribers make contributions for their beneficiaries. The pooled funds are managed, usually conservatively, by the plan administrators. Annual contributions are generally pre-set. Under group plans, the administrator determines the amount paid out to beneficiaries.

Self-directed plans are administered by a number of institutions including banks, mutual fund companies, and investment brokers. Contributions tend to be more flexible, and contributors can participate in both the investment and distribution decisions.

More than one beneficiary can be named in any particular plan. These "family" plans are often used by families with more than one child. If one of the named beneficiaries does not pursue post-secondary education, all of the income can be directed to the beneficiaries who do attend.

The contributor (versus the beneficiary) can withdraw the income from an RESP provided that the plan has been in existence more than 10 years and that none of the named beneficiaries has started qualified post-secondary programs by age 21 or all of the named beneficiaries have died.

If the beneficiaries do not attend qualifying programs, contributors are allowed to transfer a maximum of $50,000 of RESP income to their RRSPs. This is dependent on there being sufficient contribution room remaining in the RRSP. No taxes are charged on contributions that were made to the RESP when they are withdrawn, but revenues earned on the contributions made to the plan will be taxed at the contributor's regular income tax level, plus an additional penalty tax of 20%.

If the contributor (as opposed to the beneficiary) starts to withdraw income from the RESP, the plan must be terminated by the end of February of the following year.

CANADA EDUCATION SAVINGS GRANTS (CESGs)

Canada Education Savings Grants (CESGs) provide further incentive to invest in RESPs. Under this program, the federal government makes a matching grant of 20% of the first $2,500 contributed each year to the RESP of a child under 18. Depending on family income, an additional CESG is available over and above the basic CESG amount.

Worth between $500 and $600 per year (enhancements have been made to the program—see below), this grant is forwarded directly to the RESP firm and does not count towards the contributor's lifetime contribution limit. The maximum lifetime grant a beneficiary can receive is $7,200. However, CESGs must be repaid if the child does not go on to a qualifying post-secondary institution.

Table 6.5 provides an example of the CESG program.

Table 6.5 | Canada Education Savings Grants Program

	Basic CESG			Total CESG
	Contribution	**%**	**$**	
All families	$2,500	20%	$500	$500
	Additional CESG			**Total CESG**
Families earning*	**On the First**	**%**	**$**	
Up to $55,567	$500	20%	$100	$600
More than $55,567 and less than $111,733	$500	10%	$50	$550

* For 2024.

Source: Canada Revenue Agency

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Thus, a family earning under $55,567 that contributes $2,500 per beneficiary in a year will receive a CESG of $600 a year per beneficiary — 20% on the $2,500 from the basic CESG and an additional 20% on the first $500 invested in the program ($2,500 × 20% + $500 × 20%).

POOLED REGISTERED PENSION PLANS (PRPPs)

Pooled Registered Pension Plans (PRPPs) are a new type of retirement savings plan proposed by the federal government. PRPPs are designed to address the gap in employer pension plan coverage by providing Canadians with an accessible, large-scale, and low-cost pension plan. PRPPs will hold assets pooled together from multiple participating employers, allowing workers to take advantage of lower investment management costs that result from membership in a large pooled pension plan. PRPPs will be administered by eligible financial institutions such as banks and insurance companies. This design reduces the risk and cost that employers would normally bear when offering a retirement plan for employees.

Participation in a PRPP includes:

- those employed or self-employed in the Northwest Territories, Nunavut, or Yukon;
- those who work in a federally regulated business or industry for an employer who chooses to participate in a PRPP; or,
- those who live in a province that has the required provincial standards legislation in place.

A PRPP can be designed to permit members to make their own investment decisions, or to select from investment options, provided by the plan administrator, that include varying levels of risk and reward based on investor profiles.

Much like an RRSP, contributions to a PRPP are limited to available contribution room based on earned income, and contributions are tax deductible.

TAX-DEFERRAL PLANS

Can you describe the various tax-deferral plans and the advantages of using such plans? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Differentiate among the ways that interest income, foreign dividends, Canadian-source dividends and capital gains are taxed.
   - Interest income is treated the same way for tax purposes as income from employment: there is no special treatment for interest income, and investors pay taxes on interest income at their marginal tax rate.
   - Dividends from taxable Canadian corporations receive preferential tax treatment in the form of the dividend tax credit.
   - Eligible Canadian dividends are grossed-up by 38% and then the taxpayer receives a federal dividend tax credit in the amount of 15.02%.
   - Dividends from foreign corporations do not qualify for tax credit.
   - A capital gain is the result of selling a security for more than its purchase price. Only 50% of capital gains is taxed; the other 50% of a capital gain is tax free.
   - A capital loss is the result of selling a security for less than its purchase price. Capital losses cannot be applied to reduce other sources of income like dividends, interests or employment income.
2. Identify and describe the features of the government pension plans available to Canadians citizens.
   - Government pension plans include the Canada and Québec pension plans and Old Age Security.
   - Contributions to CPP or QPP are automatic and the right to a pension based on years of contribution is irrevocable and is paid out even if the contributor leaves Canada.
   - OAS is payable to most Canadians 65 years of age who meet the Canadian legal status and residence requirements.
   - A provision exists in the *Income Tax Act* (ITA) for higher-income Canadians to repay all or part of the social benefits they receive in any year. This repayment is referred to as a "clawback", and OAS payments are a social benefit that falls into this category.
3. Describe and differentiate between the most common employer-sponsored registered pension plans.
   - Employer-sponsored plans are called registered pension plans (RPPs) and include both defined benefit and defined contribution plans.
   - A RPP is a trust, registered with Canada Revenue Agency (CRA) or the appropriate provincial agency, established by a company to provide pension benefits for its employees when they retire.
   - In a defined benefit plan (DBP) the benefits are predetermined based on a formula including years of service, income level and other variables, and the contributions are designed to match the predetermined plan benefits.
   - In a defined contribution plan (DCP) the contributions to the plan are predetermined and the benefits, at retirement, will depend on how the contributions were invested.
   - In a flat benefit plan, the monthly pension is a specified dollar amount of pension for each year of service.
   - In a career average plan, the pension is calculated as a percentage of an employee's earnings over the course of her career (while in the plan).
   - In a final average plan, the pension is based on an employee's length of service and average earnings. Rather than basing the earnings over the lifetime of service, however, final average plans use a stated period of time.

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4. Describe the features of registered retirement savings plans (RRSP) and calculate the annual contribution limit to an RRSP.
   - An RRSP is an investment vehicle that allows you to defer tax and save for retirement. Annual contributions are tax deductible up to allowable limits.
   - RRSPs only defer the payment of taxes. Eventually all funds contributed to, and earned within, RRSPs will be taxed.
   - The advantage of an RRSP is that a retiree will likely pay income taxes on RRSP funds at a lower tax rate than would have been paid at the time of contribution.
   - Contributions can be made up to and including the year in which you turn 71. At the end of that calendar year, you must terminate all RRSPs.
   - There is no limit to the number of RRSPs an individual may own. However, there is a limit on the amount per year that you can contribute to an RRSP.
   - The maximum annual tax-deductible contributions to RRSPs an individual can make is the lesser of 18% of the previous year's earned income; and the RRSP dollar limit for the year.
   - A RRIF is one of the tax deferral vehicles available to RRSP holders who wish to continue the tax sheltering of their plans.
5. List and describe the features of tax-free savings accounts (TFSA).
   - Came into existence at the start of 2009.
   - Income earned within a TFSA will not be taxed in any way throughout an individual's lifetime.
   - There are no restrictions on the timing or amount of withdrawals from a TFSA, and the money withdrawn can be used for any purpose.
   - Withdrawals can be made from a TFSA at any time.
6. Describe the features of registered education savings plans (RESPs) and explain how RESPs can be enhanced with Canada Education Savings Grants (CESGs).
   - RESPs are tax-deferred savings plans intended to help pay for the post-secondary education of a beneficiary.
   - Contributions to a plan are not tax-deductible, there is a tax-deferral opportunity, since the income accumulates tax-deferred within the plan.
   - On withdrawal, the portion of the payments that were not original capital are taxable in the hands of the beneficiary or beneficiaries, provided they are enrolled in qualifying or specified educational programs.
   - There is no maximum amount that can be contributed in a single calendar year for each beneficiary.
   - There is a lifetime maximum of $50,000 per beneficiary.
   - Contributions can be made for up to 31 years, but the plan must be collapsed within 35 years of its starting date.
   - Under CESGs, the federal government makes a matching grant of at least 20% of the first $2,500 contributed each year to the RESP of a child under 18.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 6 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 6 FAQs.

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SECTION 3

UNDERSTANDING INVESTMENT PRODUCTS AND PORTFOLIOS

7 Types of Investment Products and How They Are Traded

8 Constructing Investment Portfolios

9 Understanding Financial Statements

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SECTION 3 | UNDERSTANDING INVESTMENT PRODUCTS AND PORTFOLIOS

In Section 1, we examined the role of the mutual fund sales representative, the financial marketplace and completed an overview of the mutual fund industry. Then we concentrated our learning on "knowing the client." In the upcoming Sections 3 and 4, our focus will be on knowing your product and understanding mutual funds and elements of a mutual fund investment portfolio. Remember, providing excellent client service requires both excellent client knowledge as well as excellent product knowledge.

It is important to understand securities such as stocks and bonds, even though your mutual fund licence does not permit you to advise clients on these investments. They are important because mutual funds are really just portfolios or pools of investments made up of different securities. We cannot understand mutual funds unless we have some basic knowledge and understanding of the securities of which they are composed.

We begin in Chapter 7 with our first detailed look at the individual securities that make up most mutual funds: bonds, preferred shares, common shares, and derivatives.

In Chapter 8 we introduce the concept of risk and return so that you can use your knowledge of individual products to better understand how portfolios of securities are constructed. Of importance to the mutual fund sales representative is how to calculate returns and understand the concepts of price volatility of equities and bonds. We also explain how a portfolio of securities is managed and introduce fundamental and technical analysis.

Chapter 9 provides an overview of financial statements and the type of analysis portfolio managers use to assess the suitability of an investment within a portfolio.

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Types of Investment Products and How They Are Traded

7

CONTENT AREAS

- **What Are Fixed-Income Securities?**
- **What Are the Fundamentals of Bond Pricing and Properties?**
- **What Are Equity Securities?**
- **How Are New Securities Brought to Market?**
- **What Are Derivative Securities?**

LEARNING OBJECTIVES

1 | Describe and distinguish between the characteristics and features of the different types of fixed-income securities such as government bonds, T-bills, corporate bonds, and commercial paper.

2 | Describe the various measures of yield and explain the relationship between bond prices and interest rates.

3 | Describe the features and characteristics of common and preferred shares.

4 | Differentiate among the various market transactions that investors can undertake in the equities market.

5 | Compare and contrast the basic features and characteristics of derivative securities and the various market transactions investors can carry out in the derivatives markets.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

arrears
call
call option
call premium
cash account
collateral
commercial paper
common share
convertible bond
corporate bond
coupon
coupon rate
cumulative
current yield
debentures
default risk
derivative securities
discount
dividend yield
extra dividend
fixed-income security
futures contract
government bond
guaranteed investment certificate
hard retraction
hedging
instalment debenture
interest rate risk
leverage
limit order
long position
margin
margin account
market order
marketable government bond
material fact
maturity date
non-cumulative
odd lot
option contract
option premium
par value
pari passu
preferred shares
premium
prospectus
redemption
regular dividend
retraction
secured bond
serial bond
shelf registration
short selling
soft retraction
standard trading unit
Treasury bill
underwriting
yield curve
yield to maturity

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INTRODUCTION

Investment instruments were briefly introduced in Chapter 2. It is important to understand securities such as stocks and bonds in some depth, even though your mutual fund licence does not permit you to advise clients on these investments. They are important because mutual funds are really just portfolios or pools of investments made up of securities such as stocks and bonds. You cannot understand mutual funds unless you have some basic knowledge and understanding of the securities of which they are composed.

This chapter examines:

- individual securities
- fixed-income securities, including bonds
- equity securities, including common and preferred shares
- derivative securities
- the markets in which the different securities trade
- specific types of transactions that investors undertake in the financial markets

WHAT ARE FIXED-INCOME SECURITIES?

Fixed-income securities are debt issued by an entity in the financial market and sold to investors. These securities represent the debt of the issuing entity and investors become creditors of the issuing organization. In most cases, fixed-income securities pay, or are expected to pay, a fixed amount of return on a regular basis to investors. The most common types of fixed-income securities are government and corporate bonds, **guaranteed investment certificates** (GICs), **Treasury bills** (T-bills), and commercial paper.

The terms of a fixed-income security include a promise to repay the maturity value or principal on the maturity date, and to pay interest at stated intervals over the life of the security. These regular payments made from the issuer to the holder of the debt are called **coupons**.

Corporations and governments borrow money by issuing bonds and other types of fixed-income securities for a variety of reasons. One reason is to finance their operations and fill any shortfalls in cash they are experiencing. Another reason is to use the proceeds to finance expansion and growth plans.

Corporations also borrow to take advantage of **leverage**. If a corporation believes they can earn a greater return on cash invested in their business than it would cost to borrow money, they can increase the return on the business by borrowing money.

Bonds are considered loans that investors make to governments and corporations. The borrower (the government or corporation) agrees to make regular interest payments (coupon payments) and pay back the principal or **par value** (original amount issued) on the bond's maturity date.

Almost all bonds promise to make semi-annual (every six months) coupon payments to the bondholders. The amount of the coupon payment depends on the bond's annual **coupon rate**. This rate is usually fixed over the entire life of the bond at issuance—for example, 6% of the par value over the term of the bond.

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EXAMPLE

The Government of Canada issues a $10,000,000 bond with a coupon rate of 4% for a term of 20 years. Over the next 20 years, the government will pay coupons of $400,000 per year (or $200,000 every six months) to bondholders. At maturity, the government will repay the principal amount of $10,000,000 to all bondholders. If a mutual fund manager bought $1,000,000 of this issue for her mutual fund when the bond was first issued, the fund will receive $40,000 of interest revenue every year (or $20,000 every six months) over the next 20 years and would receive the $1,000,000 principal investment back upon maturity.

The coupon represents the "fixed" income the bondholder receives from holding the bond, and is also referred to as interest income, bond income or coupon income. To calculate the semi-annual coupon payment, the bondholder multiplies the par value of the bond by the annual coupon rate and then divides the result by two to arrive at the semi-annual payment amount.

EXAMPLE

Sophie buys an ABC $10,000, 8% semi-annual coupon bond that matures May 1, 2030. The bond will pay her $400 every six months, on May 1 and November 1 of each year to maturity: (8% × $10,000) ÷ 2.

The **maturity date** is the date at which the bond matures or expires. On this date, the bondholder expects to get the par value or principal of the bond paid back.

EXAMPLE

Sophie bought the ABC bond at the par value of $10,000 when the bond was first issued. On the maturity date of May 1, 2030, she receives her final coupon payment of $400 plus the return of the par value in the amount of $10,000.

Bonds can be purchased only in specific denominations. The most commonly used denominations are $1,000 or $10,000. After being issued, bonds are bought and sold between investors in the secondary market at a stated price and a quoted yield.

Bond prices are quoted using an index with a base value of 100. A bond trading at 100 is said to be trading at face value, or par. A bond trading below par, say at a price of 98, is said to be trading at a **discount** (the 98, based on the index of 100, indicates the bond is trading at 98% of par). A bond trading above par, say at a price of 104, is said to be trading at a **premium**.

EXAMPLE

If you buy a bond with a $10,000 face value at a price of 95, it will cost you $9,500. This is equal to the face value ($10,000) multiplied by the price divided by 100 (95 ÷ 100 = 0.95). If you paid 105 for the bond, it would cost you $10,500, or $10,000 multiplied by (105 ÷ 100).

There are several varieties of bonds. To start, some types of bonds are issued by different levels of governments and other types of bonds are issued by corporations. In addition, different bond issues can have distinctive features and those features can have an impact on the bond's risk and return profile.

Most of the fixed-income securities presented below may be part of mutual funds.

GOVERNMENT BONDS

Government bonds are issued by the federal, provincial and municipal governments in order to finance public spending. In the Canadian market, a bond can be short-term, for example, with a three-year maturity or less, or very long-term, with a maturity up to 30 years.

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There is an active secondary market for **marketable government bonds** on the over-the-counter (OTC) market. Because these bonds are issued by the federal or provincial governments, they are considered to have virtually no **default risk**. Default risk is the risk that the issuer would not be able to repay the coupon over the life of the bond or the principal at maturity. Government bonds are considered to have virtually no default risk because the governments can simply increase taxes to make good on the promise to make the coupon payment or repay the par value at maturity. Credit rating agencies, the companies that examine the risk characteristics of bonds, rate the default risk of provincial bonds a little higher than that of federal government bonds, but below the default risk of municipal bonds.

TREASURY BILLS

Treasury bills are short-term government obligations. They are offered in denominations from $1,000 up to $1 million and have traditionally appealed to large institutional investors such as banks, insurance companies, and trust and loan companies, and to some wealthy individual investors. When the government started offering T-bills in denominations as low as $1,000, their appeal broadened to retail investors with smaller amounts of money to invest. They are particularly popular when their yields exceed the yield on other retail instruments, such as commercial paper.

Treasury bills do not pay interest. Instead, they are sold at a discount (below par) and mature at 100. The difference between the issue price and par at maturity represents the return on the investment, instead of interest. Under the Income Tax Act, this return is taxable as income, not as a capital gain.

Every two weeks, T-bills are sold at auction by the Minister of Finance through the Bank of Canada. These bills have original terms to maturity of approximately three months, six months and one year.

PROVINCIAL AND MUNICIPAL GOVERNMENT SECURITIES

Provincial bonds, like the Government of Canada bonds, are actually debentures. **Debentures** are simply promises to pay, and their value depends on the issuer's ability to pay interest and repay principal. No assets are pledged as security. All provinces have statutes governing the use of funds obtained through the issue of bonds. Although these securities are in fact debentures, in practice they are referred to as bonds.

Provincial bonds are second in quality only to the Government of Canada direct and guaranteed bonds because most provinces have taxation powers second only to the federal government. Different provinces' direct and guaranteed bonds trade at differing prices and yields, however.

Bond quality is determined by two primary factors: credit quality and market conditions. The credit quality of a province – that is, the degree of certainty that interest will be paid and the principal repaid when due – depends on several factors. They include the amount of existing debt in the province per capita, the level of federal transfer payments, the stability of the provincial government, and the wealth of the province in terms of natural resources, industrial development, and agricultural production.

GUARANTEED BONDS

Many provinces also guarantee the bond issues of provincially appointed authorities and commissions.

EXAMPLE

The Ontario Electricity Financial Corporation's 8.5% notes, due May 26, 2025, are "Irrevocably and Unconditionally Guaranteed by the Province of Ontario." Provincial guarantees may also be extended to cover municipal loans and school board issues. In some instances, provinces extend a guarantee to industrial concerns, usually as an inducement to a corporation to locate (or remain) in that province. Most provinces (and some of their enterprises) also issue T-bills. Investment dealers and banks purchase them, both at tender and by negotiation, usually for resale.

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In addition to issuing bonds in Canada, the provinces (and their enterprises) also borrow extensively in international markets. Unlike the federal government, whose policy is to borrow abroad largely to maintain exchange reserves, the provinces resort to foreign markets to take advantage of lower borrowing costs, based on the foreign exchange rate and financial market conditions.

Issues sold abroad are underwritten by syndicates of dealers and banks similar to those that handle foreign financing for federal government Crown Corporations. In recent years, issues have been sold, for example, payable in Canadian dollars, U.S. dollars, euros, Swiss francs and Japanese yen.

PROVINCIAL SECURITIES

Some provinces offer their own savings bonds. There are certain characteristics that distinguish these instruments from other provincial bonds and make them suitable as savings vehicles:

- They can be purchased only by residents of the province.
- They can be purchased only at a certain time of the year.
- They are redeemable every six months (in Quebec, they can be redeemed at any time).

Some provinces issue different types of savings bonds. For instance, there are three types of Ontario Savings Bonds (OSBs): a step-up bond (interest paid increases over time), a variable-rate bond, and a fixed-rate bond.

MUNICIPAL SECURITIES

Today, the instrument that most municipalities use to raise capital from market sources is the **instalment debenture** or **serial bond**. Part of the bond matures in each year during the term of the bond.

EXAMPLE

A debenture of $1 million may be issued so that $100,000 becomes due each year over a 10-year period. The municipality is actually issuing 10 separate debentures, each with a different maturity. At the end of 10 years, the entire issue will have been paid off.

Instalment debentures are usually non-callable: the investor who purchases them knows beforehand how long he or she may expect to keep funds invested. Also, if the money is needed at future specific dates, it can be invested in an instalment debenture so that it will be available when it is needed.

Broadly speaking, a municipality's credit rating depends upon its taxation resources. All else being equal, the municipality with many different types of industries is a better investment risk than a municipality built around one major industry.

CORPORATE BONDS

Corporate bonds are issued by corporations to finance the acquisition of equipment and other purposes. Companies issue corporate bonds to raise capital, as an alternative to issuing new shares – *i.e., debt financing versus equity financing*. Like government bonds, corporate bonds are subject to interest rate risk. Corporate bonds may, however, have a number of additional features that affect the return investors expect to earn as well as their risk.

First, corporate bonds have much more default risk than government bonds. Credit rating agencies use scales to indicate the quality of corporate bonds, with AAA (or A++) bonds having the best protection against default. Many corporate bonds include a promise to turn over an asset to the bondholders for liquidation if the corporation fails to make its coupon payments or pay the par value at maturity. These bonds are said to be **secured bonds** by a pledge of **collateral** (the asset) in the case of default (the failure to pay).

Not all bonds are secured. Some bonds promise to pay based on the ability of the corporation to generate earnings. These unsecured bonds are called debentures.

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Corporate bonds usually include a **call** or **redemption** feature. This feature allows the issuing corporation to redeem, or pay back, the bondholders before the stated maturity date. In exchange for forcing bondholders to give up their bonds, the corporation will likely be required to pay them a **call premium**.

Note that the call feature is always a disadvantage to the bondholder, as the corporation usually calls a bond for redemption when interest rates have fallen below the coupon rate on outstanding bonds. When bondholders reinvest the par value plus the premium, they are faced with lower coupon rates.

Another common type of bond is a **convertible bond**. Convertible bonds are bonds that can be converted or exchanged into a given number of common shares, generally of the same company. Convertible bonds have features of both bonds and common shares; when the value of the firm's shares is high, the convertible bond's value is directly linked to the value of the shares. If, on the other hand, the value of the shares is very low, then the value of the convertible bond is based on its value as a bond only.

GUARANTEED INVESTMENT CERTIFICATES (GICs)

Guaranteed investment certificates offer fixed rates of interest for a specific term (longer than a term deposit). Both principal and interest payments are guaranteed. They can be redeemable or non-redeemable. Non-redeemable GICs cannot be cashed before maturity, except in the event of the depositor's death or extreme financial hardship. Interest rates on redeemable GICs are lower than standard GICs of the same term, as they can be cashed before maturity.

Recently, banks have been customizing their GICs to provide investors with more choice. For instance, investors can choose a term of up to ten years, depending on the amount invested (for less than a month, it must be a large amount). Investors can also choose the frequency of interest payments (monthly, semi-annual, annual or at maturity) and other features. Many GICs offer compound interest.

Not all GICs are eligible for RRSPs. GICs can be used as collateral for loans, however, can be automatically renewed at maturity, and can be sold to another buyer privately or through an intermediary.

GICs with special features include the following.

Escalating-rate GICs	The interest rate increases over the GIC's term.
Laddered GICs	The investment is evenly divided into multiple term lengths (for example, a five-year $5,000 GIC can be divided into one-, two-, three-, four- and five-year terms of $1,000 each). As each portion matures, it can be reinvested or redeemed. This diversification of terms reduces interest rate risk.
Instalment GICs	An initial lump sum contribution is made, with further minimum contributions made weekly, bi-weekly or monthly.
Index-linked GICs	These guarantee a return of the initial investment upon expiry and some exposure to equity markets. They are insured by the CDIC. They may be indexed to particular domestic or global indexes or to a combination of benchmarks.
Interest-rate-linked GICs	These offer interest rates linked to the changes in other rates, such as the prime rate, the bank's non-redeemable GIC interest rate, or money market rates.

Some banks have also developed GICs with specialized features, such as the ability to redeem them in case of medical emergency, or homebuyers' plans, where regular contributions accumulate for a down payment.

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COMMERCIAL PAPER

Commercial paper is an unsecured promissory note issued by a corporation or an asset-backed security backed by a pool of underlying financial assets. Issue terms range from less than three months to one year. Most corporate paper trades in $1,000 multiples with a minimum initial investment of $25,000. Like T-bills and BAs, commercial paper is sold at a discount and matures at face value. Commercial paper is issued by large firms with an established financial history. Rating agencies rank commercial paper according to the issuer's ability to meet short-term debt obligations. Commercial paper may be bought and sold in a secondary market before maturity at prevailing market rates and generally offers a higher yield than Canada T-bills.

WHAT ARE THE FUNDAMENTALS OF BOND PRICING AND PROPERTIES?

As explained previously, bonds are issued at par, pay fixed interest over their lifespan and repay the principal at maturity. However, during their life, bonds are bought and sold among investors in the secondary market and their prices fluctuate. They are rarely bought or sold at par in the secondary market and instead will typically trade at a price above or below par.

Bonds trade at a quoted price. Recall that a bond trading at a quoted price of 100 is said to be trading at face value, or par. A bond trading below par, say at a price of 98, is said to be trading at a discount (the 98, based on the index of 100, indicates the bond is trading at 98% of par). A bond trading above par, say at a price of 104, is said to be trading at a premium.

If you buy $10,000 of a 5% bond that trades at 98, you will pay $9,800 for that bond (98% of $10,000). The bond is said to be sold at a discount. You will receive a coupon of $500 every year (usually paid $250 every six months) for the life of the bond. If you keep your bond until maturity, you will receive $10,000. You have made $500 per year of interest and a $200 capital gain at maturity (bought at $9,800, sold at $10,000).

If you buy $10,000 of a 5% bond that trades at 104, you will pay $10,400 for that bond (104% of $10,000). The bond is said to be sold at a premium. You will receive a coupon of $500 every year (usually paid $250 every six months) for the life of the bond. If you keep your bond until maturity, you will receive $10,000. You have made $500 per year of interest and experienced a $400 capital loss at maturity (bought at $10,400, sold at $10,000).

Bond prices are affected by a number of factors, including economic conditions and changes but one of the most important factors in bond pricing is interest rates. Fixed income securities generally react differently to economic factors than do equities, and it is important to understand the impact of events that affect these securities.

This course will not present bond pricing calculations in detail. These quotes are calculated by professionals, and bonds are generally traded by institutional investors like mutual fund managers. This topic is beyond the scope of this course. However, since mutual funds are built from these securities (and equities, that will be discussed later in the chapter), there are some basics that mutual fund representatives must understand about fixed-income securities pricing.

The most important bond pricing characteristics you must understand about the volatility of mutual funds are:

- The inverse relationship between bond prices and interest rates
- The impact of maturity and coupon on price volatility

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THE INVERSE RELATIONSHIP BETWEEN BOND PRICES AND INTEREST RATES

The most important bond pricing relationship to understand is the inverse relationship between bond prices and interest rates (or bond yields)—as interest rates rise, bond prices fall and as interest rates fall, bond prices rise.

It is important to note that discount rate, interest rate, yield and yield to maturity are often used to refer to the same thing. However, the yield of a bond should not be confused with the coupon rate; they are two different things. While the coupon rate, along with the face value and maturity date, do not change, the price and yield of a bond fluctuates from day to day. Given the yield and the coupon rate, the following relationships hold:

- If the yield is greater than the coupon rate, the bond is trading at a discount.
- If the yield is equal to the coupon rate, the bond is trading at par.
- If the yield is lower than the coupon rate, the bond is trading at a premium.

Fixed income mutual funds are impacted by interest rates. When the general interest rates in the economy rise, the value of fixed income mutual funds decrease. Conversely, when general interest rates drop, the value of fixed income mutual funds increase.

THE IMPACT OF MATURITY AND COUPON ON PRICE VOLATILITY

The term to maturity and the percentage of the coupon also have an impact on the volatility of bonds.

Longer-term bonds are more volatile in price percentage change than shorter-term bonds for the same yield change.

A mutual fund that includes long-term bonds will drop more in price if general interest rates in the market rise from 4% to 5% than another mutual fund that holds bonds with shorter terms to maturity. Thus, knowing the average maturity date of fixed income funds is important when assessing its volatility due to changes in interest rates.

As a bond approaches its maturity over the years, it will become less volatile. For example, a bond originally issued with a ten-year maturity will, seven years later, have a three-year term, and will be priced as and behave like a three-year bond at that time.

Our next pricing relationship states that lower-coupon bonds are more volatile in price than high coupon bonds for the same yield change.

When yields rise, all bonds drop in price, but, for the same yield change, low coupon bonds drop more than high coupon bond. The larger the difference between coupons, the more significant the difference in volatility.

As you can see, bonds are subject to a potentially high degree of price volatility. This is known as **interest rate risk**, which is the risk that changes in interest rates will adversely affect the value of the investment. Mutual funds that include fixed-income products in their portfolio of investments are subject to interest rate risk.

Bonds are also subject to other types of risk. For example, if there is some doubt about the borrower's ability to pay interest and repay principal, the default risk on that particular bond would be considered high. Credit rating agencies examine the default risk of bond issuers and make this default information available to investors.

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BOND YIELD CALCULATIONS

Bond yields can be calculated in different ways for different purposes. The following presents two simple ways to calculate bond yields. The yields of fixed income mutual funds are generally given by the mutual funds so the calculation of fixed-income portfolios will not be discussed here.

CURRENT YIELD

We can calculate the **current yield** of any investment, whether it is a bond or a stock, using the following formula:

$$\text{Current Yield} = \frac{\text{Annual Cash Flow}}{\text{Current Market Price}} \times 100$$

In this case, the annual cash flow is the coupon paid by the bond. As previously discussed, coupons are fixed for the life of the bond, so the annual cash flow is simply the total coupon paid.

Note that current yield looks only at cash flows and the current market price of the investment, not at the amount that was originally invested.

EXAMPLE

A 4-year, 9% bond, trading at a price of 96.77, would have a current yield of:

$$\frac{\$9}{96.77} \times 100 = 9.30\%$$

Current yield ignores the time until maturity of the bond and the repayment of the principal. Current yield is used to compare the short-term return of a bond to the short-term returns of other bonds.

CALCULATING THE YIELD TO MATURITY ON A BOND

Unlike a current yield, where the yield is calculated as the coupon income divided by current price, the **yield to maturity** (YTM) calculation assumes that the investor will be repaid the par value of the investment at maturity.

Therefore, YTM not only reflects the investor's return in the form of coupon income; it also includes any capital gain from purchasing the bond at a discount and receiving par at maturity, or any capital loss from purchasing the bond at a premium and receiving par at maturity.

Manually calculating YTM is a difficult task. The easy way to solve for YTM is to use a financial calculator.

EXAMPLE

Continuing with the 4-year, semi-annual 9% bond, trading at a price of 96.77, we can find the semi-annual YTM in the following way:

Type 8 Press N

Type 4.50 press PMT

Type 96.77 press +/– press PV (minus sign in front of 96.77 denotes an outflow of funds from investor)

Type 100 press FV

Press COMP press I/Y

Answer: 4.9997% or 5%

The semi-annual YTM on this bond is 5.0%. The annual YTM is 10% (5% × 2), which makes sense because the bond is trading at a discount to par. If you buy this bond today at the price of $96.77 and hold it to maturity, you would receive 8 payments of $4.50 plus $100 at maturity. The YTM calculation factors in the $3.23 gain on this bond ($100 – $96.77), the coupon income, plus the reinvestment of the coupon income at this YTM.

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A financial calculator makes the YTM calculation quite easy. Exhibit 7.1 shows how to carry out the calculation manually using the approximate YTM method.

Exhibit 7.1 | Approximate Yield to Maturity—Manual Calculation

The formula for the approximate YTM is:

$$\frac{\text{Interest income} +/- \text{Price change per compounding period}}{(\text{Purchase price} + \text{Par Value}) \div 2} \times 100$$

We use +/– in the formula to show that you can buy a bond at a price above or below par. Let's say you buy a bond at a discount to par, say at a price of 92, and hold it to maturity. At maturity, the bond matures at par and you realize a gain on the investment. In the formula, you would add this price appreciation to the interest income. The opposite holds if you buy a bond at a premium, say at 105, and hold it to maturity. In our formula, you would subtract the price decrease from the interest income.

For example, let's calculate the yield on the 4-year, semi-annual 9% bond, trading at a price of 96.77 that matures at 100.

- The semi-annual interest or coupon income on this bond is $4.50.
- What is the annual price change on this bond (based on $100 par)? The present value of the bond is 96.77 and will mature at 100. Therefore, it will increase in value over the remaining life of the bond by $3.23. Since there are eight compounding periods remaining in this bond's term, the bond generates a gain in price of $0.4038 per period over the remaining eight compounding periods ($3.23 ÷ 8).
- What is the average price on this bond (based on $100 par)? The purchase price is $96.77. The redemption or maturity value is $100. The average price is 98.385, or (96.77 + 100) ÷ 2.

  The approximate semi-annual YTM on this bond is:

$$= \frac{\$4.50 + \$0.4038}{(96.77 + 100) \div 2} \times 100$$

$$= \frac{\$4.9038}{98.385} \times 100$$

$$= 4.9842\%$$

The annual YTM is 9.9684% (4.9842% × 2).

You will notice that this result is very close to the YTM found using the calculator method. For accuracy, a financial calculator provides a more precise amount.

THE YIELD CURVE

Not only do bond prices fluctuate due to yield changes, but the relationship between short-term and long-term bond yields also tends to fluctuate. This relationship is easily plotted on a graph for similar long-term and short-term bonds and results in a line called a yield curve. The **yield curve** shows the relationship between interest rates and the time to maturity for a given borrower. In normal conditions, the longer the term to maturity, the higher the interest rate. While a yield curve can be drawn for any issuer with multiple bond issues outstanding, the yield curve most often used by investors is the one representing the YTM on benchmark national government bonds.

Figure 7.1 represents an example of the yield curve of the Government of Canada bonds.

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Figure 7.1 | Short-and long-term government of Canada security yields

In normal conditions, short-term interest rates are typically lower than longer-term interest rates. There are two common explanations for this. First, there is greater uncertainty with longer-term maturities, which means greater risk. Because you should be compensated for the risk you take, longer-term bonds should yield more. Second, the market may anticipate a rise in interest rates. If interest rates are to rise, long-term investors would require today a higher yield to compensate for the expected rise in interest rates.

Let's assume that 3-year Government bonds yield 2.5% and 30-year Government bonds yield 5%. According to the yield curve, if interest rates rise by 1% across all terms, the 3-year Government bonds will now yield 3.5% and the 30-year Government bonds will now yield 6%.

BOND TERMINOLOGY REVIEW

How familiar are you with bond terminology? *Complete the online learning activity to assess your knowledge.*

Case Study | The Balmers: Aren't Bond Funds Guaranteed Never to Lose? (*for information purposes only*)

Joanne is meeting with her retired clients, Beth and Dave Balmer. In their mid-seventies, the Balmers have a sizable portfolio of bond funds that generate considerable income for the couple. But with interest rates having steadily fallen to their near-historic lows today, the Balmers are also drawing down some of the principal of their portfolio to supplement the interest income it generates. Joanne has read a number of recent reports from her firm's chief economist that argue that interest rates are poised to rise in the coming months, so she is concerned that the Balmers may begin to suffer negative returns on their bond portfolio. As conservative investors, she wants to meet with the Balmers to explain this concern to them and to help them better understand the exposure they have to rising interest rates.

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Case Study | The Balmers: Aren't Bond Funds Guaranteed Never to Lose? (*for information purposes only*)

Joanne begins by reviewing the Balmers' investment goals and re-confirming their investment profile. The Balmers are very happy with their portfolio. Despite generating a lower income flow as interest rates, yields and coupon rates have dropped over the years, the offsetting rise in the value of their bond portfolio has allowed them to draw down their capital without eroding too much of the portfolio's value.

Joanne agrees that the long-term trend of falling interest rates over the past 20-plus years has worked very well for fixed-income investors. However, she explains to the Balmers that the trend is expected to reverse in the near future, with interest rates and bond yields expected to rise. She explains that, as interest rates rise and bond yields rise, generally the value of bonds fall. The Balmers are confused, as they believed that bonds and bond funds really couldn't lose money – aren't bonds guaranteed? Joanne explains that in fact, yes, they can lose value as yields rise because:

- The coupons on existing bonds are set at the market interest rates that prevailed when they were issued and remain the same throughout the term of the bond; so, when yields rise, the now lower-than-market coupon rates of existing bonds will be lower than newer bonds priced with coupons at the higher prevailing market interest rates.
- The older bonds and their lower-than-market coupons must now lower their prices to be more attractive to buyers who are looking for a total return– price appreciation and coupon payments – of their bonds to be within the range of prevailing yields.
- Also, bond mutual fund owners are potentially exposed to further negative returns as unit holders – now exposed to losses as yields rise – sell their holdings. This increase in mutual fund redemptions may force bond fund manager to sell bonds before their maturity in order to raise cash to meet redemption requests, thereby increasing losses for unit holders.

Finally, Joanne explains to the Balmers that the longer the term to maturity of the bond fund's holdings, the more sensitive the fund's bonds are to changes in yields. While the Balmers, now aware of their exposure, are pleased that Joanne informed them, they are confident that over time, their fund manager will manage the situation, and offset their capital losses with higher coupon payments from new issues as yields rise.

WHAT ARE EQUITY SECURITIES?

Equity securities, particularly common stocks or shares, are an important part of most investors' portfolios. History has shown that the return on stocks has exceeded the return on bonds over the long term. In addition, long-term common stock returns have consistently outpaced inflation, providing long-term protection from a loss of purchasing power.

Common shares form the backbone of many investment portfolios and are a major component of pension funds, mutual funds, and hedge funds. Unlike many other types of investments, there are a number of inherent rights, advantages, and disadvantages of common share ownership with which you must be familiar.

COMMON SHARES

Common shareholders are the owners of a company and initially provide the equity capital to start the business.

If the venture prospers, the shareholders benefit from the growth in value of their original investment and the flow of dividend income. The prospect of a small investment growing to many times its original value attracts investors to common shares.

On the other hand, if the business fails, the common shareholders may lose their entire investment. This possibility of total loss explains why common share capital is sometimes referred to as venture or risk capital.

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Summary of Common Shares

Position on asset claims in case of bankruptcy	Senior creditors (such as banks), bond and debenture holders and preferred shareholders all have prior claims on the company's assets in case of bankruptcy. Common shares, therefore, have a relatively weak position on asset claims.
Dividends	Unlike debt interest, common share dividends are payable at the discretion of the board of directors. There is no guarantee of dividend income.
Evidence of ownership	Shares are most often registered in street certificate form, meaning they are registered in the name of the securities firm rather than the beneficial owner. This increases the negotiability of the shares, making them more readily transferable to a new owner.
Clearing and settlement	CDS Clearing and Depository Services Inc. (CDS) offers computer-based systems to replace certificates as evidence of ownership in securities transactions. This system almost eliminates the need to handle securities physically.
Trading units	Stocks trade in uniform lot sizes on stock exchanges. A **standard trading unit** is a regular trading unit which has uniformly been decided upon by the exchanges. The usual unit of trading for most stocks is 100 shares. A group of shares traded in less than a standard trading unit is called an **odd lot**.

BENEFITS OF COMMON SHARE OWNERSHIP

The right to buy or sell common shares in the open market at any time is an attractive feature and a relatively simple matter with few legal formalities.

When a company first sells its shares to investors, the proceeds from the sale go to the company. When these outstanding shares are subsequently sold by their holders, the selling price is paid to the seller of the shares and not to the corporation. Shares, therefore, may be transferred from one owner to another without affecting the operations of the company or its finances. From the company's point of view, the effect of a sale is simply that a new name appears on its list of shareholders.

The following are some of the benefits of common share ownership:

- Potential for capital appreciation
- The right to receive any common share dividends paid by the company
- Voting privileges, including the right to elect directors, to approve financial statements and auditor's reports, and vote on other important issues
- Favourable tax treatment in Canada of dividend income and capital gains
- Marketability – shareholdings can easily be increased, decreased, or sold, for most public companies
- The right to receive copies of the annual and quarterly reports, and other mandatory information pertaining to the company's affairs
- The right to examine certain company documents such as the by-laws and register of shareholders at specified times
- The right to question management at shareholders' meetings
- Limited liability

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CAPITAL APPRECIATION

For many investors, and for mutual fund portfolio managers, the prospect of capital appreciation is the main attraction of common shares. Common shares may increase in value, making the stock more attractive to investors. Increasing profits and increasing dividend payments can also result in a higher demand for the stock, thereby leading to the stock's capital appreciation.

It is important to keep in mind that not all common shares fulfill these expectations, and even those that increase shareholder equity, earn profits and increase dividend payments will not necessarily increase in value every year. There are many other factors that can affect a company's stock price, and careful analysis is required by the fund manager to ensure a profitable investment.

DIVIDENDS

A company's net earnings are available for distribution as dividends, or they may be retained within the company and reinvested in the business, or a combination of the two.

Dividend policy is determined by the board of directors, who are guided primarily by the goals of the company, the size of the company, the industry in which it participates, and the financial position of the company. For example, mature companies, such as banks, may pay out a substantial percentage of their earnings as dividends to shareholders, while growing companies such as those in the technology field may need to keep a high proportion of earnings within the company to fund the large amount of research and development that are crucial to their success.

To maintain its operations and finance future growth opportunities, most companies will retain a portion of earnings each year. In the long run, this policy may work to the benefit of shareholders if it results in increased earnings.

Reductions or omissions of dividends do occur, particularly in poor economic times, and although they may be temporary, they do emphasize the risks of common share investment.

REGULAR AND EXTRA DIVIDENDS

Some companies paying common share dividends designate a specified amount that will be paid each year as a **regular dividend**. The term *regular* indicates to investors that payments will be maintained, barring a major collapse in earnings.

Some companies may also pay an **extra dividend** on the common shares, usually at the end of the company's fiscal year. The extra is a bonus paid in addition to the regular payout – but the term extra cautions investors not to assume that the payment will be repeated the following year.

COMMON SHARE CHARACTERISTICS

How familiar are you with common share characteristics? *Complete the online learning activity to assess your knowledge.*

PREFERRED SHARES

Preferred shares are issued by corporations to raise capital for investment projects. They are issued in the primary market (the new issue market) at a par value. That value can be different for different issues, but a par value of $25 per share is common. In addition to a par value, preferred shares have a stated dividend amount or, alternatively, a stated **dividend yield**.

For example, a preferred share may have a $25 par value and may pay an annual dividend of $2.50. This means that the dividend yield is $2.50 ÷ $25, or 10%.

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Fixed-rate perpetual preferred shares are an example of preferred shares that pay a fixed quarterly dividend. Not all preferred shares, however, have fixed rates. Floating-rate preferred shares, for example, pay a dividend that adjusts, or floats, based on either a percentage of the Canadian Bank Prime Rate or the yield on 3-month Government of Canada T-Bills plus some spread. Fixed-reset preferred shares, on the other hand, are preferred shares with fixed dividend rates that periodically reset according to a formula or process outlined at the time the shares are issued.

There is also a secondary market for preferred shares. Some trade on the OTC market and some on an organized exchange. Generally, when a firm's common shares are listed for trading on an exchange, its preferred shares are listed on the same exchange as well.

Preferred shareholders are usually entitled to a regular dividend payment, subject to the discretion of the board of directors. Because of this income stream, most preferred shares are treated by investors like a type of fixed-income security. However, preferred shareholders are not in the same category as creditors holding typical fixed-income securities, such as bonds and debentures. As part owners of a company, along with common shareholders, preferred shareholders rank behind creditors in their claim to assets. Preferred shareholders do, however, have priority status over common shares in the event of bankruptcy or dissolution of the company.

Some companies issue more than one class or series of preferred shares. When this occurs, each class or series is identified separately. If the rank of various outstanding preferred share issues is equal as to asset and dividend entitlement, the shares are described as ranking **pari passu**.

PREFERRED SHARE FEATURES

Preferred shares have several features that reflect their unique position relative to common shares and bonds and debentures, as described below.

PREFERENCE AS TO ASSETS

Preferred shareholders rank ahead of common shareholders but behind creditors and debtholders in their claim to assets. Preferred shareholders are therefore better protected than common shareholders, but less protected than creditors and debtholders.

Because preferred shareholders usually have no claim on earnings beyond the fixed dividend, it is fair for their position to be buttressed by a prior claim on assets, ahead of the common shares. The common shareholder must be content with anything that is left after all creditor, debtholder, and preferred shareholder claims have been met.

PREFERENCE AS TO DIVIDENDS

Preferred shares are usually entitled to a fixed or floating dividend expressed either as a percentage of the par or stated value, or as a stated amount of dollars and cents per share.

Dividends are paid from earnings, either current or past. However, unlike interest on a debt security, dividends are not obligatory; they are payable only if declared by the board of directors. If the board omits the payment of a preferred dividend, there is little the preferred shareholders can do about it. However, in almost all cases the charters of companies provide that no dividends are to be paid to common shareholders until preferred shareholders have received full payment of the dividends to which they are entitled.

Directors have the right to defer the declaration of preferred dividends indefinitely. In practice, however, dividends are paid if they are justified by earnings. Failure to declare an anticipated preferred dividend has unfavourable repercussions. Besides weakening investor confidence, the general credit and future borrowing power of the company will suffer.

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Because most preferred shares can be considered fixed-income securities, they do not offer the same potential for capital appreciation that common shares provide for investors. When interest rates decline, preferred share prices tend to increase in price, much like a bond. However, good corporate earnings will have no effect on a preferred share's dividend or claim to assets. Therefore, the preferred share dividend rate is of prime importance to the preferred shareholder.

OTHER FEATURES

Beyond their place in the capital structure and entitlement to dividends, the following features can be built into a preferred share, either to strengthen the issuer's position or to protect the investor's position.

Figure 7.2 | Special Features of Preferred Shares

Cumulative or non-cumulative dividends	Preferred share dividends can be **cumulative** or **non-cumulative**. If a company's board of directors votes not to pay one or more preferred share dividends when due, and the preferred share has a cumulative dividend feature, the unpaid dividends accumulate in what is known as **arrears**. All arrears of cumulative preferred dividends must be paid before common share dividends are paid or before the preferred shares are redeemed. With a non-cumulative dividend feature, arrears do not accrue, and the preferred shareholder is not entitled to catch-up payments if dividends resume. Most preferred shares in Canada have a non-cumulative dividend feature.
Term to maturity	Most preferred shares have no stated maturity date. Depending on the specific features of a preferred share, investors may not have the ability to force the repayment of the par value; therefore, a preferred share can be outstanding for an indefinite period.
Callable feature	Almost all preferred shares are callable, meaning they can be called or redeemed by the issuer at a stated time and stated price. Depending on when a preferred share is called, it may provide for the payment of a small premium above the issue price. The premium is compensation to the investor whose shares may be called for redemption.
Retraction feature	A preferred share with a **retraction** feature gives shareholders the right to force the company to buy back the shares on a specified date at a specified price. Some are issued with two or more retraction dates. The holder of a preferred share with a retractable feature can create a maturity date for the preferred by exercising the retraction privilege and tendering the shares to the issuer for redemption. With a **hard retraction** feature, the company must pay the redemption value in cash. A **soft retraction** feature allows the company to pay the redemption value in cash or common shares of the issuer.
Voting privileges	Virtually all preferred shares are non-voting if preferred dividends are paid on schedule. However, after a stated number of preferred dividends have been omitted, it is common practice to assign voting privileges to the preferred shares.

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RISKS OF INVESTING IN PREFERRED SHARES

Preferred shares can be attractive investments to many investors, but they are not risk free; in fact, their risks are similar to those of fixed-income securities.

Interest rate risk	Because they represent a claim on a stream of dividends, preferred shares are sensitive to the general level of interest rates. When interest rates rise, the prices of fixed-rate preferred shares tend to fall because the fixed dividend will be worth less to investors in a higher-rate environment. The reverse also holds true.
Credit risk	Because preferred shareholders rank below all creditors and bondholders in the event of bankruptcy, preferred share prices can be quite sensitive to changes in perceived creditworthiness, especially when that perception goes down.
Call risk	Because almost all preferred shares are callable at the option of the issuer, investors are subject to call risk. Call risk is the risk that the investors will be forced to give up their preferred shares when it is not in their best interest, which usually occurs when the shares are trading at a premium to their par value.
Extension risk	A corollary to call risk is extension risk. If a preferred share does not have a retraction feature, the issuer has the sole ability to determine when it will return the par value to investors. It can effectively keep extending the repayment date by simply not calling the preferred share for redemption. Investors can always sell their preferred shares in the market, but if the market price is below the par value, then there is a strong possibility it will not be redeemed at the next redemption date.
Liquidity risk	The total market value of preferred shares in Canada is a fraction of the market value of common shares and of bonds and debentures. As a result, the value that changes hands each day through trading on Canadian exchanges is also small. Furthermore, the fact that a good portion of many preferred shares are held by individual investors means that the liquidity in any individual preferred share is low.

PREFERRED SHARE SPECIAL FEATURES

What are the special features of preferred shares? *Complete the online learning activity to assess your knowledge.*

HOW ARE NEW SECURITIES BROUGHT TO MARKET?

The process of bringing new securities to market is known generally as **underwriting**. The financial intermediary acting as the underwriter is a securities dealer. For the issuance of new corporate securities such as corporate bonds, common and preferred shares, the underwriter provides two distinct services. First, it advises the issuing corporation in the preparation of the **prospectus**—the document that provides a complete description of the firm and the securities to be offered. Second, the underwriter often arranges for the purchase of the new issue and bears the risk that some of the securities might remain unsold at the specified price.

The prospectus is the single most important source of information for potential investors concerning the new issue. The prospectus must be registered with each provincial securities commission in every province in which the underwriter intends to solicit offers to purchase. The securities commissions merely ensure that the prospectus provides the necessary information. They do not comment in any way on the investment merits of any security, which the individual investor must determine. Nor does the registration of the prospectus imply that the securities

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commissions have verified the information contained in it. If it contains errors or misrepresentation of material fact or omits a material fact, then the issuing corporation is legally liable. A **material fact** is a fact that, if correctly stated, would likely lead investors to change their purchase decision.

Most corporate issuers must produce a new prospectus each time they make a new offer of securities to the public. This is true even when a company is only issuing additional common shares. However, frequent issuers of securities are not always required to produce a full prospectus containing all relevant company information, as they are already well known to the investing public. Instead, these firms are permitted to issue a simplified prospectus for new issues, sometimes referred to as **shelf registration**. Mutual funds, as continuous issuers of new securities, are permitted to file simplified prospectuses. They must provide investors with the fund facts disclosure document before the investors purchase the mutual funds, and they must provide the simplified prospectus to investors upon request. In contrast to corporate issues, government bonds are not underwritten by an investment dealer. Instead, investment dealers bid for the bonds that the government is issuing in the expectation of selling them to the investing public at a profit.

TRADING SECURITIES

The trading of Canadian equity securities (common and preferred shares) takes place on a stock exchange. Typically, investors contact their stockbroker and give an order to buy or sell a certain number of shares of a corporation. When the stockbroker receives the order, it is forwarded electronically to the exchange. If the order is to buy or sell at the current market price, then the order is known as a **market order**. Many other types of orders are possible. For example, an investor may put in an order to buy one standard trading unit of common stock if that stock should fall to a certain price. This type of order is known as a **limit order**.

Once an order has been received by the exchange, it will be filled immediately if it is a market order; if it is a limit order, then it will go into the exchange's consolidated electronic order book. In the book, the limit order is visible to all dealer members who can execute it at the first best possible price. When the order is filled, the information is conveyed back to the stockbroker who initiated the transaction on behalf of the client. The client then receives a confirmation with the details of the transaction: the security traded, the number of shares bought (or sold), the price, the date of the trade and the amount of the commission.

Note that the broker acts as an agent of the investor in exchange-based trading. In this case, the broker does not itself own the securities at any time during the transactions. The broker's profit is the agent's commission charged for each transaction.

TYPES OF MARKET TRANSACTIONS

The simplest type of market transaction is the buying or selling of a security. For fixed-income securities, investors expect to earn regular income (from interest or from preferred dividends). Decreases in market interest rates can also result in capital gains since the market values of fixed-income securities will increase as interest rates fall. Common shares are bought on the expectation of earning some combination of dividend income and capital gains.

There are, however, transactions other than the simple buying and selling of securities that investors may use to earn a return on movements in security prices. Investors may buy securities using money borrowed from a stockbroker. This type of brokerage account is called a **margin account**. In a margin account, the client can buy securities on credit and initially pay only part of the full price of the purchase. In these types of transactions, the securities firm lends the remainder of the purchase amount to the client and charges interest on this amount. If a client opens a margin account, the securities firm will grant credit to the client based on the market value and quality of the securities in the margin account.

A margin account contrasts with an account in which no borrowing is permitted, called a **cash account**. In a cash account, the client is expected to make full payment for purchases on or before the required settlement date—usually one business day after the transaction date. When a client opens a cash account with a broker, they are not granted credit and the understanding is that the client will make full payment by the settlement date.

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Investors also may undertake a transaction to benefit from a fall in the price of a security. This type of transaction is called a short selling.

Short selling is defined as the sale of securities that the seller does not own. Profits are made whenever the initial sale price exceeds the subsequent purchase cost. With **long positions**, an investor purchases a security and then holds it in the hope of selling it later at a higher price. With short selling, the order of the transactions is reversed. The investor sells the security first, and then waits in the hope of buying it back later at a lower price. Since the seller does not own the securities sold, the seller in effect creates a "deficit" or *short position* where he or she owes securities, and the subsequent purchase covers or "repays" this deficit.

Short selling is generally carried out in the belief that the price of a stock is going to fall. The short seller feels bearish toward a particular security and sells it short, hoping to buy it back later at a lower price. If the sale is made at a higher price than the subsequent purchase, the investor has made a profit.

Note that buying on margin and selling short are allowed only by full-brokerage firms who are licenced to do so on behalf of their clients. Mutual funds are prohibited from buying on margin and selling securities short.

WHAT ARE DERIVATIVE SECURITIES?

Derivative securities are securities whose value depends on the value of another security or asset. They are contracts created between two investors: a buyer and a seller. If the derivative is an option to buy shares at a fixed price, then as those shares increase in value, the **option contract** should increase in value as well. Similarly, **futures contracts**, either on commodities such as wheat or oil, or on financial assets such as a stock market index, will change value depending on the price change in the underlying asset.

The fundamental risk and return characteristic of derivatives is that they provide exposure to the underlying asset for a small fraction of the value of the asset. This characteristic is known as leverage. For example, consider a stock trading at $20. Assume that calls are traded on the stock. A **call option** gives its owner the option of buying shares (usually 100 shares per option contract) at the fixed exercise price prior to the call's expiration date. Assume for this example that the calls cost the investor $2.00 (the call "**option premium**"). If the stock moves up substantially, then the investor will benefit on a dollar-for-dollar basis with the increase in the stock price, even after paying a small up-front price to acquire the call ($2.00). If the stock falls, however, then the investor may see the value of the investment fall to zero.

EXAMPLE

Tanya buys a three-month call option on the shares of XYZ at a cost of $2. This contract gives her the right to buy the shares at a specified price—$20 in this example—within the three-month period. Two months later, XYZ shares are trading at $25. Tanya exercises her right to buy the shares at $20, and then immediately sells the shares at the current market price of $25 for a profit of $5 per share.

Since she paid a $2 premium to buy the call, her profit is $3 per share ($5 profit from the shares less the $2 premium paid to buy the call). Her total profit is $300 on the position (100 shares × $5 profit – $2 premium) or 150% ($300 ÷ $200) of her initial investment after two months.

If the share price of XYZ had instead fallen over the term of the contract, Tanya would lose the premium she paid to enter the contract. In this example, her loss would have been $200 ($2 × 100 shares).

Futures contracts share this leverage feature. In a futures contract, an investor agrees to buy or sell an underlying asset at a settlement date at some time in the future. To initiate this agreement, the investor is required to put up only a small fraction of the futures contract's underlying value. This amount is called **margin**. For example, if you wish to buy a futures contract on long-term Government of Canada bonds, you will have to put up no more than $1,750 of margin. But this $1,750 gives you exposure to an underlying contract value of $100,000 worth of bonds.

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The fact is that a relatively small change in the underlying asset value can either generate a very large return for the owner of the derivative or virtually wipe out the value of the investment. This leverage is very attractive to speculators. However, from the perspective of mutual fund portfolio managers, the charm of derivatives lies in the strategies they permit for protecting the mutual fund portfolio from a potentially dramatic decline in value. Those strategies are known as **hedging**. Hedging is like buying an insurance policy for protection from unexpected occurrences. In addition, futures contracts, in combination with other securities, can be used to mimic (i.e., synthesize or "clone") other securities or portfolios.

USE OF DERIVATIVES BY MUTUAL FUNDS

Subject to strict regulatory controls, mutual fund managers are allowed to incorporate specific "permitted" derivatives as part of their portfolios. Recall that derivatives are contracts whose value is based on the performance of an underlying asset such as a commodity, a stock, a bond, foreign currency or an index. Options (puts or calls), futures, forwards, rights, warrants and combination products are among the permitted derivatives used by mutual fund managers.

The most prominent applications of derivatives among mutual fund managers are to hedge against risk and to facilitate market entry and exit. It is often cheaper and quicker to enter the market using derivatives rather than purchasing the underlying securities directly.

EXAMPLE

A fund manager may have experienced a rapid growth in the value of her portfolio, but she is concerned that the market may fall. To protect herself against a fall in value, she purchases put options on the iShares S&P/TSX 60 Index Fund. If the market declines, the fall in value of the portfolio is offset by an increase in the value of the put options. Other managers may sell call options on shares they already own in order to enhance the fund's income. When fund managers deal internationally, they may use futures contracts as protection against changes in currency values.

One focus of National Instrument 81-102 is to allow the use of derivatives to benefit investors by minimizing overall portfolio risk while, at the same time, ensuring that portfolio managers do not use derivatives to speculate with investors' money. This regulation covers such topics as:

- The total amount (10% maximum as a percentage of the net assets of a fund) that can be invested in derivatives
- How derivative positions must be hedged by the assets of the fund (based on daily portfolio valuations)
- Expiry dates on different option products
- Permitted terms
- The qualifications required by portfolio advisors to trade these instruments

There are exceptions to these rules. Hedge funds, for example, are exempted.

The use of permitted derivatives must be described in a mutual fund's simplified prospectus. Briefly, the discussion must explain how the derivative(s) will be used to achieve the mutual fund's investment and risk objectives, and the limits of and risks involved with their planned use.

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SUMMARY

After reading this chapter, you should be able to:

1. Describe and distinguish between the characteristics and features of the different types of fixed-income securities such as government bonds, T-Bills, corporate bonds, and commercial paper.
   - Fixed-income securities are considered loans that investors make to governments and corporations.
   - Types of fixed-income securities include government and corporate bonds, GICs, T-bills, and commercial paper.
   - Government bonds have virtually no default risk but are subject to interest rate risk.
   - Corporate bonds are subject to both interest rate risk and default risk.
   - Bonds can have a number of features including a redemption (or call) feature. Convertible bonds can be converted into common shares of the issuing company.
   - Commercial paper is an unsecured promissory note issued by a corporation or an asset-backed security backed by a pool of underlying financial assets.
2. Describe the various measures of yield and explain the relationship between bond prices and interest rates.
   - Interest rate and bond prices have an inverse relationship: the value of a bond will decrease as interest rates increase, and vice versa.
   - This tendency of bonds to change in value with changing interest rates is called interest rate risk.
   - Two types of return calculation were presented for bonds: the current yield and the YTM.
     - The current yield is the coupon payment for one year divided by the market price of the bond.
     - The YTM shows the return you would expect to earn over the life of a bond starting today, assuming you are able to reinvest the coupons you receive at the YTM.
   - The yield curve represents the relationship between the interest rate and the time to maturity for a given borrower.
3. Describe the features and characteristics of common and preferred shares.
   - Common shares are issued by corporations and are expected to earn either dividends or capital gains, or both.
   - Preferred shares are issued by corporations to raise capital for investment projects and are generally issued at a fixed par value per preferred share.
   - Preferred shares are usually entitled to a fixed or floating dividend payment.
   - Preferred shares have preference as to assets and dividends over common shares. However, preferred shares rank lower than creditors and debtholders.
   - Risks of investing in preferred shares include interest rate risk, credit risk, call risk, extension risk, and liquidity risk.

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4. Differentiate among the various market transactions that investors can undertake in the equities market.
   - Underwriters aid firms in bringing new securities to market. Once issued, securities trade on exchanges or over the counter.
   - Different types of market transactions exist for different purposes. The most common transaction is the purchase in which an investor buys a security in the expectation of a price increase. In some cases, investors expect prices to fall. In that case, they may consider a short sale. In addition, investors may buy securities on margin; that is, they may borrow a percentage of the value of the investment.
   - An investor would buy on margin with the expectation that the price of the underlying securities will rise in price; an investor would short sell securities with the expectation that the share price will fall.
5. Compare and contrast the basic features and characteristics of derivative securities and the various market transactions investors can carry out in the derivatives markets.
   - Derivative securities include calls and puts, and futures contracts.
   - Puts and calls are exchange-traded options giving the owner the option to buy (for calls) or to sell (for puts) a number of shares at a fixed price (the exercise or strike price) at any time prior to the option's expiration date.
   - Futures are contracts that are negotiated to buy or sell commodities, stock indices or bonds at some future date but at currently negotiated prices.
   - All derivatives provide the possibility of leveraged gains and losses.
   - Mutual fund managers are allowed to incorporate derivatives as part of their portfolios under certain conditions. The most prominent applications of derivatives among mutual fund managers are to hedge against risk and to facilitate market entry and exit. They are not allowed to use derivatives to speculate.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 7 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 7 FAQs.

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Constructing Investment Portfolios

8

CONTENT AREAS

- What Is Risk and Return?
- What Are the Impacts of Economic Conditions in Comparing Returns?
- How to Calculate a Return
- How to Measure Risk
- What Is Portfolio Analysis?
- How Are Portfolios Managed?
- What Are the Methods of Analysis?

LEARNING OBJECTIVES

1 | Describe the basic concepts of return and risk and explain how they are used to evaluate the risk profile of mutual fund investments.

2 | Define inflation and purchasing power and the role taxation plays when comparing the risk and return of securities.

3 | Calculate the return on a security.

4 | Calculate the risk of a security.

5 | Define portfolio analysis and explain the role of diversification, describe the concept of correlation, and describe the tool used to measure risk in a portfolio.

6 | Describe the concept of efficient markets and how strategic asset allocation is used to determine an optimal portfolio mix.

7 | Describe how fundamental analysis and technical analysis are used in the selection of securities.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

active portfolio management

alpha

arithmetic mean

asset allocation

average

beta

correlation

diversification

dividend tax credit

duration

efficient

fundamental analysis

geometric mean

holding period return

inflation

insider trading

investment portfolio

market risk

market timing

mean

nominal return

passive portfolio management

perfect negative correlation

perfect positive correlation

portfolio manager

purchasing power

real rate of return

return

risk

risk profile

sector weighting

security analysis

standard deviation

strategic asset allocation

systematic risk

technical analysis

variance

volatility

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INTRODUCTION

No perfect security exists that meets all the needs of all investors. If such a security existed, there would be no need for investment and portfolio management, and no need to measure the return and risk of an investment. Portfolio managers spend a great deal of time selecting individual securities, allocating investment funds among security classes, and managing risks and returns.

Recognizing that there are no perfect securities, we need to look at the different measures and methods to estimate risk and predict return. Based on these results, we can then see how portfolios are constructed to fit the particular needs and circumstances of individual investors. Building portfolios that correlate to specific client needs is key to being successful. Generating the highest returns is not enough; higher returns that require exposure to risky investments may not be appropriate for you and your clients. The most fundamental concepts in investing are return and risk. Returns are why individuals invest. But returns are never entirely guaranteed. They are always subject to some kind of risk. This chapter covers the different ways to measure these factors.

So far in the text, when we have discussed the risk and return characteristics of securities, we have looked at them as "stand-alone" investments. That is, we have not been concerned with the impact that grouping different securities together might have on the risk and return characteristics of the whole package.

In fact, when we construct portfolios of securities into a mutual fund, the portfolio behaves far differently in terms of risk and return than the individual securities might suggest that it should. For example, although bond investments are considered to be less risky than common stock investments, a portfolio combining both bonds and common stocks *can be less risky* than the bond investments alone. Note that this critically important result is more than just the idea that you can reduce risk by not having "all of your eggs in one basket." One of our goals of this chapter is to explain why this risk reduction occurs. The other goal is to explain the different techniques that investors, and professional portfolio managers, might use in their attempts to obtain the best returns for the lowest overall level of risk. This will lead us to a discussion of how securities are selected and how the portfolio, once constructed, is managed on a day-to-day basis.

WHAT IS RISK AND RETURN?

Risk and **return** are interrelated. To earn higher returns investors must usually choose investments with higher risk.

> *Given a choice between two investments with the same amount of risk, a rational investor would always take the security with the higher return. Given two investments with the same expected return, the investor would always choose the security with the lower risk.*

Each investor has a different risk profile. This means that not all investors choose the same low-risk security. Some investors are willing to take on more risk than others are if they believe there is a higher potential for returns.

In general, risk can have several different meanings. To some, risk is losing money on an investment. To others, it may be the prospect of losing purchasing power if the return on the investments does not keep up with inflation.

Given that all investors do not have the same risk profile, different securities and different funds have evolved to service each market niche. Guaranteed investment certificates (GICs) were developed for those seeking safety, fixed-income funds were developed for those seeking income, while equity funds were developed for those seeking growth or capital appreciation.

Few individuals would invest all of their funds in a single security. The creation of a portfolio allows the investor to diversify and reduce risk to a suitable level.

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Consider the following possible investments and the types of return generated:

- An investor who buys Government of Canada bonds expects to earn interest income (cash flow).
- An investor in common shares expects to see the stock grow in value (capital gain) and may also be rewarded with dividends (cash flow).

Returns are rarely guaranteed and that is why returns are often called "expected returns."

While an investment may be purchased in anticipation of a rise in value, the reality is that values can decline. A decline in the value of a security is often referred to as a capital loss. Therefore, returns can be reduced to some sort of combination of cash flows and capital gains or losses.

The following formula defines the expected return of a single security:

Expected Return

$$\text{Expected Return} = \frac{\text{Expected Cash Flow} + \text{Expected Capital Gain (or – Capital Loss)}}{\text{Beginning Value}}$$

Where:

Expected Cash Flow	=	Expected dividends, interest, or any other type of income
Expected Capital Gain/Loss	=	Expected Ending Value – Beginning Value
Beginning Value	=	The initial dollar amount invested by the investor
Expected Ending Value	=	The expected dollar amount the investment is sold for

PUTTING RISK AND RETURN INTO PRACTICE

Higher risk must be compensated for by the hope of a higher return because investors, on average, avoid taking on risk. In most cases, when investment professionals talk about risk they are referring to volatility. Compare, for example, Figures 8.1 and 8.2. Figure 8.1 shows stability in the annual return generated on a hypothetical money market fund over the past 15-year period. The return varies little from year to year, with an average annual return of 4.6%. Stability is the opposite of volatility.

Figure 8.1 | Returns on a Hypothetical Money Market Fund

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Figure 8.2, in contrast, shows an average annual return of 10.4% on a hypothetical equity mutual fund during the same 15-year period. This is a higher average annual return than in Figure 8.1, but the returns are highly volatile from year to year.

During Year 3, for example, this investment produced a 45% return. If you had invested $10,000 at the beginning of Year 3, you would have had $14,500 at the end of the year. We can find this amount using the following calculation:

$$\text{Original Investment} + (\text{Percent return} \times \text{Original Investment})$$

$$= \$10{,}000 + (0.45 \times \$10{,}000)$$

$$= \$10{,}000 + \$4{,}500$$

$$= \$14{,}500$$

If you had invested $10,000 at the beginning of Year 6, however, you would have lost 35%, reducing your capital to $6,500. We can find this amount using the same calculation from above:

$$\text{Original Investment} - (\text{Percent return} \times \text{Original Investment})$$

$$= \$10{,}000 - (0.35 \times \$10{,}000)$$

$$= \$10{,}000 - \$3{,}500$$

$$= \$6{,}500$$

Figure 8.2 | Returns on a Hypothetical Equity Mutual Fund

As you can see, the **risk profile** of the second investment, the equity mutual fund, is different from that of the money market fund. Using volatility as the measure of risk, you could state that the second investment has been riskier than the first. Assuming this historical pattern continues into the future, you could conclude that the second investment is the riskier one.

Consider the case of a client with a three-year investment horizon and $10,000 to invest. Assume that his choices are a money market fund, a bond fund, and an equity fund. Table 8.1 represents the risk/return profile of the money market fund presented in Figure 8.1, assuming the investor bought the money market mutual fund investment at the beginning of the year and held it for a three-year period until the end of the third year.

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Table 8.1 | Annual Returns on the Money Market Fund from Figure 8.1

Year	Return
Year 1	3.3%
Year 2	3.7%
Year 3	4.3%

If the client had invested the $10,000 at the beginning of Year 1, the investment would have been worth $11,172.84 by the end of Year 3. Table 8.2 shows how this result was obtained by calculating the ending value of the investment for each year and then adding the next year's return.

Table 8.2 | Three-Year Returns on the Money Market Fund

Year	Value Jan. 1	Add	Amount to add	Value Dec. 31
Year 1	$10,000.00	3.3%	$330.00	$10,330.00
Year 2	$10,330.00	3.7%	$382.21	$10,712.21
Year 3	$10,712.21	4.3%	$460.63	$11,172.84

In contrast, Table 8.3 represents the risk/return profile of the equity mutual fund from Figure 8.2 for the same three-year period.

Table 8.3 | Annual Returns on the Equity Mutual Fund from Figure 8.2

Year	Return
Year 1	+20%
Year 2	+30%
Year 3	+35%

Making the same basic calculations as before, we find that the investor's $10,000 investment at the beginning of Year 1 would have been worth $21,060 by the end of Year 3, as shown in Table 8.4.

Table 8.4 | Three-Year Returns on the Equity Mutual Fund

Year	Value Jan. 1	Add/Subtract	Amount to add	Value Dec. 31
Year 1	$10,000	+20%	$2,000	$12,000
Year 2	$12,000	+30%	$3,600	$15,600
Year 3	$15,600	+35%	$5,460	$21,060

The fundamental issue here is that risky investments offer the hope of higher returns, but over short periods (or horizons), volatility can work for or against a client's interests. A longer investment time horizon, such as a six-year period, would have yielded different results. If the client had invested in the money market fund in Year 10, for example, and held that investment through to the end of Year 15, the investment would have been worth $12,615.90, as calculated in Table 8.5.

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Table 8.5 | Six-Year Returns on the Money Market Fund

Year	Value Jan. 1	Add	Amount to add	Value Dec. 31
Year 10	$10,000.00	4.7%	$470.00	$10,470.00
Year 11	$10,470.00	4.2%	$439.74	$10,909.74
Year 12	$10,909.74	3.5%	$381.84	$11,291.58
Year 13	$11,291.58	3.3%	$372.62	$11,664.20
Year 14	$11,664.20	3.7%	$431.58	$12,095.78
Year 15	$12,095.78	4.3%	$520.12	$12,615.90

In contrast, if the client had invested in the equity fund and held that investment over the same period, he would have done even better than with the money market fund. His equity fund investment would have been worth $13,562.64 by the end of Year 15, as shown in Table 8.6.

Table 8.6 | Six-Year Returns on the Equity Fund

Year	Value Jan. 1	Add/Subtract	Amount to Add/ Subtract	Value Dec. 31
Year 10	$10,000.00	–20%	$(2,000.00)	$8,000.00
Year 11	$8,000.00	–30%	$(2,400.00)	$5,600.00
Year 12	$5,600.00	+15%	$840.00	$6,440.00
Year 13	$6,440.00	+20%	$1,288.00	$7,728.00
Year 14	$7,728.00	+30%	$2,318.40	$10,046.40
Year 15	$10,046.40	+35%	$3,516.24	$13,562.64

Note that despite losing 36% of his original investment in the first three years, the investor improved his position a great deal by holding his investment in the riskier equity fund for a longer time. A few more good years would have yielded an even better performance for the equity fund in comparison to the money market fund.

The future is unpredictable, however. Because equity funds are riskier than money market funds, the equity fund *should* do better than the money market fund over the longer term, but not necessarily over the short term.

WHAT ARE THE IMPACTS OF ECONOMIC CONDITIONS IN COMPARING RETURNS?

Over the last 50 years, bonds have shown much greater return volatility than T-bills, which means they have been a riskier investment than T-bills. On average, however, bond returns have been higher than T-bill returns, compensating for that risk. This is not always the case. Expectation of higher returns based on risk may not result in higher returns, even over the long-term. Equities, in turn, are even more volatile than bonds. Correspondingly, the average return for equities is higher than the average annual return on bonds.

Thus, of the three basic securities, T-bills are intrinsically the least risky, long-term bonds are riskier but historically have compensated investors for that additional risk, and equities are the riskiest and have also provided some risk compensation. In all three, however, expected returns and *realized* returns may not coincide. For one thing, extrinsic factors in the wider economy also have an impact on returns. Those economic factors include inflation and taxation.

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INFLATION

Inflation is a generalized, sustained trend of rising prices. When prices are rising, money begins to lose its value—that is, more and more money is needed to buy the same amount of goods and services. Overall, inflation and rising prices have a negative effect on living standards.

Inflation has averaged about 4.2% per year in Canada over the past 50 years. However, inflation has not been much of a problem in Canada over the last two decades; in fact, Canada's inflation rate has been less than 3% for much of the past twenty years.

It is important to consider the effects of inflation on investments because we can isolate the difference between nominal and real returns. Investors are more concerned with the **real rate of return**—the return adjusted for the effects of inflation. A **nominal return** is a return that has not been adjusted for the impact of inflation.

The approximate real rate of return is calculated as:

Real Return = Nominal Rate – Annual Inflation Rate

Example: A client earned a nominal return of about 3% on a T-bill last year when inflation was measured at 2%. Adjusting the nominal return for the inflation rate yields a real return of about 1% on the T-bills.

For you and your clients, the significance of adjusting for inflation is that the value of real returns determines purchasing power.

PURCHASING POWER

Purchasing power is the ability to buy goods and services. What real return is required to maintain the purchasing power of an investment? An investment's purchasing power is maintained when a dollar put aside in an earlier year can still buy the same amount of goods today. Purchasing power is maintained when your dollar grows (or generates a nominal return) at a rate that is at least equal to the rate of inflation. Thus, if inflation is 5% and your nominal return is 5%, then you will just maintain purchasing power. Adjusting that 5% nominal return to reflect the 5% inflation rate means that a real return of 0% is needed to maintain purchasing power.

You may be asking yourself what value does a real return of 0% offer? The answer is not much from an investing perspective. The difference between just keeping up with inflation and generating positive real returns represents an increase in the investor's wealth. Increasing wealth is the goal of investing and that usually means accepting higher investment risk.

TAXATION

The examples so far have not taken tax into consideration. In most cases, however, you must pay annual taxes on investment returns.

The tax rate to be paid on investment income depends on the type of income generated. The three types are interest income, dividend income, and capital gains.

Type of Investment Income	Sources of Income
Interest Income	Treasury bills, bonds, money market mutual funds
Dividend Income	Common and preferred shares
Capital Gains	Selling an investment for more than the price paid

You will pay a different tax rate on income from each of these sources.

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Of the three investment income sources, interest income is the most highly taxed, because it is taxed at the same rate as income from employment. Dividend income, so long as it comes from taxable Canadian corporations, receives the benefit of a tax reduction known as the **dividend tax credit** (discussed in Chapter 6). This credit results in a lower tax rate on dividend income than on interest income. Capital gains are taxed at a different rate; only 50% of capital gains are taxed at the ordinary income rate.

Thus, you and your clients should always be concerned with after-tax returns.

HOW TO CALCULATE A RETURN

RATE OF RETURN ON A SINGLE SECURITY

Returns from an investment can be measured in absolute dollars. An investor may state that she made $100 or lost $20. Unfortunately, using absolute numbers obscures their significance. Was the $100 gain made on an investment of $1,000 or an investment of $100,000? In the first example the gain may be significant, while in the latter it could signal a poor investment choice.

The more common practice is to express returns as a percentage or as a rate of return or yield. Within the investment community, it is more common to hear that "a fund earned 8%" or "a stock fell 2%." To convert a dollar amount to a percentage, the usual practice is to divide the total dollar returns by the amount invested.

$$\text{Return \%} = \frac{\text{Cash Flow} + (\text{Ending Value} - \text{Beginning Value})}{\text{Beginning Value}} \times 100$$

Rate of Return on an Individual Stock Example

1. If you purchased a stock for $10 and sold it one year later for $12, what would be your rate of return?

$$\text{Rate of Return} = \frac{\text{Zero Cash Flow} + (\$12 - \$10)}{\$10} \times 100 = 20\%$$

2. If you purchased a stock for $20 and sold it one year later for $22, and during this period you received $1 in dividends, what would be your rate of return?

$$\text{Rate of Return} = \frac{\$1 + (\$22 - \$20)}{\$20} \times 100 = 15\%$$

3. If you purchased a stock for $10, received $2 in dividends, but sold it one year later for only $9, what would be your rate of return?

$$\text{Rate of Return} = \frac{\$2 + (\$9 - \$10)}{\$10} \times 100 = 10\%$$

The above examples illustrate that cash flow and capital gains or losses are used in calculating a rate of return. It should also be noted that all of the above trading periods were set for one year, and hence the percent return can also be called the annual rate of return. If the transaction period were for longer or shorter than a year, the return would be called the **holding period return**.

Over time, individual holding period returns fluctuate; in some periods they may be high, while in others they may be low. These fluctuations can make it hard to compare the returns on different investments, because it might not be easy to determine which security or portfolio had the better overall return over the entire period. One of the

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most widely used methods to compare the returns on two investments over many holding periods is to calculate an **average** or **mean** of the holding period returns.

There are two different ways to calculate a mean return: the **arithmetic mean** and the **geometric mean**.

The arithmetic mean is easy to calculate. It is simply the sum of the individual holding period returns divided by the number of holding period returns. If, for example, you want to calculate the most recent five-year arithmetic mean of a mutual fund, simply add up the fund's annual returns for the last five years and divide by 5. The following equation can be used to calculate the arithmetic mean return.

$$AMR_i = \frac{R_{i,1} + R_{i,2} + \ldots + R_{i,T}}{T}$$

Where:

AMR_i = the arithmetic mean return on security or portfolio *i*

$R_{i,t}$ = the holding period return on security or portfolio *i* for period *t*

T = the number of holding period returns

The geometric mean calculates the average compound return over several time periods. It is used to determine the periodic increase or decrease in wealth from an investment in a security or portfolio of securities. The following equation can be used to calculate the geometric mean return.

$$GMR_i = \left[\left(1 + R_{i,1}\right) \times \left(1 + R_{i,2}\right) \times \ldots \times \left(1 + R_{i,T}\right)\right]^{1/T} - 1$$

Where:

GMR_i = the geometric mean return on security or portfolio *i*

$R_{i,t}$ = the holding period return on security or portfolio *i* for period *t*

We will use annual return data for two hypothetical mutual funds (see Table 8.7) to provide examples of how the arithmetic and geometric means are calculated.

Table 8.7 | Return Data for Two Mutual Funds

Year	Trinity Canadian Equity Fund Return	Alpha Canadian Equity Fund Return
1	49.36%	18.01%
2	15.67%	15.15%
3	–7.17%	4.83%
4	–8.78%	–3.68%
5	26.51%	17.93%

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At the end of the fifth year, the five-year arithmetic mean return for each fund is as follows:

$$\begin{aligned} AMR_{Trinity} &= \frac{49.36 + 15.67 - 7.17 - 8.78 + 26.51}{5} \\ &= \frac{75.59}{5} \\ &= 15.118 \\ &= 15.12\% \end{aligned}$$

$$\begin{aligned} AMR_{Alpha} &= \frac{18.01 + 15.15 + 4.83 - 3.68 + 17.93}{5} \\ &= \frac{52.54}{5} \\ &= 10.448 \\ &= 10.45\% \end{aligned}$$

At the end of the fifth year, the five-year geometric mean return, also known as the five-year compound annual return, for each fund is as follows:

$$\begin{aligned} GMR_{Trinity} &= \left(1.4936 \times 1.1567 \times 0.9283 \times 0.9122 \times 1.2651\right)^{1/5} - 1 \\ &= \left(1.850795\right)^{0.2} - 1 \\ &= 1.131024 - 1 \\ &= 0.131024 \\ &= 13.10\% \end{aligned}$$

$$\begin{aligned} GMR_{Alpha} &= \left(1.1801 \times 1.1515 \times 1.0483 \times 0.9632 \times 1.1793\right)^{1/5} - 1 \\ &= \left(1.618114\right)^{0.2} - 1 \\ &= 1.101037 - 1 \\ &= 0.101037 \\ &= 10.10\% \end{aligned}$$

As the previous calculations show, the arithmetic mean and geometric mean of a security are different, even though they are based on the same holding period returns. The arithmetic mean will always be greater than the geometric mean, unless the sub-period returns are identical, in which case the arithmetic and geometric means will be the same.

For instance, if a security had a 5% annual return every year for the past five years, then the arithmetic and geometric means would both equal 5%. In general, the more volatile the sub-period returns, the greater the difference between the arithmetic and geometric means. This can be seen by looking at the returns in Table 8.7.

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The geometric mean is the best measure of the historical performance of a security, because it measures the actual change in wealth that would have resulted from an investment in that security. For example, if an investor had bought $1,000 worth of the Trinity fund at the beginning of the first year and had held it until the end of fifth year, the investment would have averaged a return of 13.10% per year, growing from $1,000 to $1,850.60 during the five-year period.

Case Study | Compounding Confusion: Helping Investors Understand Geometric Mean Returns
(*for information purposes only*)

Michael is meeting with his client, Paul Parker, to discuss his most recent investment statement. Paul made a $20,000 investment into the XYZ U.S. Large Cap Equity Fund (XYZ) five years ago. Over that time, Paul experienced a tremendous amount of volatility, as the U.S. equity markets suffered through the financial crisis downturn and then moved sharply higher as the markets at first stabilized then rebounded. Paul was deeply concerned when his investment in the XYZ fund fell sharply in the first few years. He realized he did not do so bad on the investment after adding up the fund's annual calendar returns and dividing by five, ending up with an average of 4.8% per year. When he received his most recent statement, he was surprised to learn that the return he actually made was lower than the return he calculated himself. He wants to better understand from Michael how his investment returns are calculated.

Michael explained to Paul that he had used a method called the arithmetic mean return, and this method of calculating return does not reflect the average compound return. He also explained that historical returns are best calculated using the geometric mean return method, as straight arithmetic mean returns like Paul used will always be higher than the realized average return.

Here is what Michael explained to Paul:

You took XYZ's annual return in each of the last five years:

Year 1: –23%

Year 2: –9%

Year 3: +7%

Year 4: +18%

Year 5: +31%

You added the five single returns and divided by 5 to get the average.

$$\frac{(-23) + (-9) + 7 + 18 + 31}{5} = 4.8\%$$

Based on Paul's calculations, the fund averaged 4.8% per year over the five-year period.

Michael shows Paul how his five-year return was calculated for his statement:

$$GMR = \left[(1 - 0.23) \times (1 - 0.09) \times (1 + 0.07) \times (1 + 0.18) \times (1 + 0.31)\right]^{1/5} - 1$$

$$GMR = \left[(0.77) \times (0.91) \times (1.07) \times (1.18) \times (1.31)\right]^{1/5} - 1$$

$$GMR = 1.15896^{1/5} - 1$$

$$GMR = 0.02994454, \text{ or } 2.99\%$$

The fund's end value was $23,179.24 after 5 years, and the fund averaged 2.99% over the five-year period.

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Case Study | Compounding Confusion: Helping Investors Understand Geometric Mean Returns (*for information purposes only*) — *Cont'd*

If we calculate the return on a yearly basis, we get the following result after five years:

	Beginning	Return	End
Year 1	$20,000.00	–23%	$15,400.00
Year 2	$15,400.00	–9%	$14,014.00
Year 3	$14,014.00	7%	$14,994.98
Year 4	$14,994.98	18%	$17,694.08
Year 5	$17,694.08	31%	**$23,179.24**

If we calculate the return using the geometric mean of 2.994454%, we get the same results:

	Beginning	Geometric mean Return	End
Year 1	$20,000.00	2.994454%	$20,598.89
Year 2	$20,598.89	2.994454%	$21,215.72
Year 3	$21,215.72	2.994454%	$21,851.01
Year 4	$21,851.01	2.994454%	$22,505.33
Year 5	$22,505.33	2.994454%	**$23,179.24**

Michael explained to Paul that the result is not exact with the arithmetic mean. The geometric mean shows the accurate measure of the historical performance of a security.

RATE OF RETURN ON A PORTFOLIO

The expected rate of return on a portfolio is calculated in a slightly different manner from the rate of return of a single security. Since the portfolio contains a number of securities, the return generated by each security has to be calculated.

Portfolio Returns

The return on a portfolio is calculated as the weighted average return on the securities held in the portfolio. The formula is as follows:

$$\text{Expected Return} = R_1(W_1) + R_2(W_2) + \ldots + R_n(W_n)$$

Where:

R = The expected return on a particular security

W = The proportion (weight or %) of the security held in the portfolio based on the dollar investment

n = The number of securities in the portfolio

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The following example illustrates:

Rate of a Return on a Portfolio

A client invests $100 in two securities: $60 in ABC Co. and $40 in DEF Co.

The expected return from ABC Co. is 15% and the expected return from DEF Co. is 12%. To calculate the expected return of the portfolio, an advisor or investor would look at the rate expected to be generated by each proportional investment.

Since the total amount invested was $100, ABC Co. represents 60% ($60 ÷ $100) of the portfolio and DEF Co. represents 40% ($40 ÷ $100) of the portfolio. If ABC Co. earns a return of 15% and DEF Co. earns 12%, the expected return on the portfolio is:

$$\begin{aligned} \text{Expected return} &= (0.15 \times 0.60) + (0.12 \times 0.40) \\ &= 0.09 + 0.048 \\ &= 0.138 \text{ (or } 13.8\%) \end{aligned}$$

This is a good example of how mutual funds calculate the return on their funds.

HOW TO MEASURE RISK

Although there are many types of risk, risk generally is synonymous with **volatility**—the idea that the return on an investment may be unpredictable: high during one period and low during another. Every investor's dream is to be able to get a high return without incurring any risk. The reality, however, is that risk and return are directly related. To earn higher returns, investors usually must select investments that carry higher risk.

As noted earlier in this chapter, given a choice between two investments with the same amount of risk, a rational investor would always take the security with the higher return. Given two investments with the same expected return, the investor would always choose the security with the lower risk.

MEASURES OF PRICE VOLATILITY OF EQUITIES

All equities bear risk and this risk can be assessed and measured with tools developed over time. The three common measures of risk are variance, standard deviation and beta.

Variance measures the extent to which the possible realized returns differ from the expected return or the mean. The more likely it is that the return will not be the same as the expected return, the riskier the security. When an investor purchases a T-bill, the return is predictable. The return cannot change as long as the investor holds the T-bill until maturity.

With other securities (e.g., equities), the outcomes are more varied. The price could increase, stay the same or decrease. The greater the number of possible outcomes, the greater the risk that the outcome will not be favourable. The greater the distance estimated between the expected return and the possible returns, the greater the variance. The risk of a portfolio is determined by the risk of the various securities within that portfolio.

Standard deviation is the measure of risk commonly applied to portfolios and to individual securities within that portfolio. Standard deviation is the square root of the variance. The past performance or historical returns of securities is used to determine a range of possible future outcomes. The more volatile the price of a security has been in the past, the larger the range of possible future outcomes.

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The standard deviation, expressed as a percentage, gives the investor an indication of the risk associated with an individual security or a portfolio. The greater the standard deviation, the larger the likely range of possible future outcomes, and therefore the greater the risk.

EXAMPLE

Comparing Standard Deviation

You are considering an investment in the ABC Equity Fund or the DEF Equity.

Fund	Average 5-Year Return	Standard Deviation	Probable Range of Returns
ABC Equity	12%	10%	2% or 22%
DEF Equity	12%	4%	8% or 16%

Although both funds have reported the same average return over the past five years, the DEF fund has a lower standard deviation in returns. Thus, DEF is considered less risky than ABC.

To simplify the calculations, we can find the probable range of returns as follows:

Average Return + Standard deviation = Positive outcome

Average Return – Standard deviation = Negative outcome

Though the returns for either fund can be higher or lower than the range indicated by the standard deviation, the probable range of returns for ABC Fund stands between 22% (12% + 10%) and 2% (12% – 10%). The same method is used to find the probable range on the DEF Fund.

DEF has a narrower probable range of returns; or we can say that the DEF fund is less risky than the ABC fund.

All other factors being equal (e.g., the economy stays the same, the fund managers are not replaced, the stock market continues its current trend, interest rates remain stable, and so on), both mutual funds could be expected to earn an average annual return of 12%. But in any given year, the fund with the higher standard deviation could fluctuate much more widely, making it less attractive as an investment, even over the long-term.

Beta is another statistical measure that links the risk of individual equity securities or a portfolio of equities to the market as a whole. The risk that remains after diversifying is market risk. Beta is important because it measures the degree to which individual equity securities or a portfolio of equities tend to move up and down with the market. A higher beta means that the portfolio is exposed to more risk. The general convention is that the market has a beta of 1.0. All portfolios can be viewed in terms of how volatile they are in relation to a market beta of 1.0.

EXAMPLE

The ABC Equity Fund has a beta of 1.5, which means the Fund is expected to be 1.5 times more volatile than the market as a whole. If the S&P/TSX Composite Index is used to measure the performance of the ABC Fund, then if the Index rose by 10% you would expect to see the ABC Fund rise by 15% (1.5 × 10%). Similarly, if the S&P/TSX should fall by 20%, then the Fund should fall by 30% (1.5 × 20%).

The higher the beta, the greater the risk.

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MEASURES OF PRICE VOLATILITY OF BONDS

Measuring the price volatility (or the risk) of bonds and portfolios of bonds is different than equities. Changes in interest rates represent one of the main risks faced by investors when holding fixed-income securities. We already discussed the following relationships:

- The value of a bond changes in the opposite direction to changes in interest rates—i.e., as interest rates rise, bond prices fall and as interest rates fall, bond prices rise.
- For two bonds with the same term to maturity and the same yield, the bond with the higher coupon is usually less volatile in price than the bond with the lower coupon.
- For two bonds with the same coupon rate and same yield, the bond with the longer term to maturity is usually more volatile in price than the bond with the shorter term to maturity.

As we have seen, it is fairly easy to compare bonds with the same term to maturity or the same coupon, but how do we compare bonds with different coupon rates and different terms to maturity? For example, how can we determine whether a bond with a high coupon and a long term will be more or less volatile than a bond with a lower coupon and a shorter term?

A given change in interest rates will impact the price of bonds with different features, coupons, maturities, protective covenants, etc. differently. For bondholders, being able to determine the impact of interest rate changes on bond prices will lead to better investment decisions.

Fortunately, a calculation exists called duration, which combines both the impact of the coupon rate and the term to maturity into one calculation.

Duration is a measure of the sensitivity of a bond's price to changes in interest rates. It is defined as the approximate percentage change in the price or value of a bond for a 1% change in interest rates. The higher the duration of the bond, the more it will react to a change in interest rates. Duration is simply an investment tool that helps investors determine the volatility or riskiness of a bond or a bond fund – i.e., how much the price of the bond will move up or down with changes in interest rates. In this way, a single duration figure for each bond or bond fund can be compared directly with the duration of every other bond or bond fund.

Consider a bond with the duration of 10. According to our definition, the price of this bond will change by approximately 10% for each 1% change in interest rates. Let's assume that the bond is currently priced at 105. If interest rates rise by 1% then the price of the bond will fall by approximately 10% to 94.50. This is calculated as 105 – (10% × 105).

Since a higher duration translates into a higher percentage price change for a given change in yield, an investor will realize the greatest return from an expected decline in interest rates by investing in bonds with a higher duration. If he does this and interest rates do fall, he will earn a greater return than if he had invested in bonds with lower duration. The same is true when interest rates are expected to rise. To protect a bond portfolio from a dramatic decline due to an interest rate increase, investors should invest in bonds with low duration.

We are not constrained to 1% interest rate changes. As long as the duration of the bond is known, the effect of any range of interest rate changes can be determined. For example, for a 50-basis-point or 0.5% change in interest rates, the approximate price change on our bond with a duration of 10 is 5% (10 × 0.5%); for a 0.25% change in interest rates, the approximate price change on the bond is 2.5% (10 × 0.25%) etc.

Table 8.8 shows the impact interest rate changes have on bonds with different durations. As the table shows, the same interest change of 1% has a greater impact on the price of Bond A compared with the price change on Bond B.

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Table 8.8 | Impact of an Interest Rate Change on Bonds with Different Durations

	Bond A Duration = 10	Bond B Duration = 5
Both Bond A and Bond B are priced at	$1,000	$1,000
Interest rates rise by 1% • the price of Bond A falls by 10% • the price of Bond B falls by 5%	$900	$950
Interest rates fall by 1% • the price of Bond A rises by 10% • the price of Bond B rises by 5%	$1,100	$1,050

Calculation of a bond's duration is complicated. Moreover, a bond's duration can change over longer holding periods and larger interest rate swings. Therefore, we have not shown its calculation here. The duration of bond funds is generally provided by the mutual fund itself. This is an important measure of volatility that must be taken into consideration when recommending a bond fund for clients.

As you have seen, securities differ in the returns they are expected to produce and the risks they present to investors. The investment features of different securities contribute to differences in their risk/return profiles. Fixed-income securities, for example, have different features than equity securities and derivatives. Figure 8.3 shows how asset classes are positioned in relation to risk and return.

Figure 8.3 | Risk and Return Relationship

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WHAT IS PORTFOLIO ANALYSIS?

An **investment portfolio**, such as a mutual fund, is simply a collection of different securities. Securities may be of the same class, such as a bond portfolio or a common equity portfolio. A portfolio may also consist of securities of many different classes, including bonds, stocks and money market securities. Some portfolios even include derivative securities, such as options and futures. The fundamental characteristic of an investment portfolio is that it is a diversified collection of securities.

DIVERSIFICATION AND RISK

Diversification refers to the spreading of investment risk by buying different types of securities in different companies in different kinds of businesses and or locations. Portfolios have different degrees of diversification based on the number of securities, the types of security, and the industries or countries the securities come from. Overall, the greater the diversification, the lower the portfolio risk.

EXAMPLE

By investing in securities in more than one industry, you avoid exposure to the risk that any one industry will decline. If you hold a diversified portfolio from many different countries, you avoid exposure to the risk of a decline in your home economy. Portfolios can be diversified in a great many ways.

The important point to recognize is that if you placed all of your savings or investments in a single security, your entire portfolio is at risk. However, no matter how well diversified a portfolio is, there will always remain some amount of risk that cannot be removed. The risk that cannot be eliminated or reduced by diversification is called **market risk**, or **systematic risk**.

Market risk is defined as the variability of a stock or a portfolio in relation to the market as a whole. The process of diversification cancels out much firm-specific risk, so market risk is less than the total risk you would calculate if you looked at each stock separately. Market risk is also referred to as systematic risk and arises from such things as inflation, the business cycle, and interest rates.

Another reason for diversifying is that different classes of securities, such as bonds and stocks, tend to exhibit different patterns of returns. Although some of these risks can be eliminated through diversification, the selection of securities within a portfolio must be done carefully in order to maximize returns while reducing risk. Combining any two securities may not diversify the portfolio if the risk characteristics of the two securities are extremely similar. This concept of combining securities for maximum benefit is measured by the correlation between securities.

COMBINING SECURITIES IN A PORTFOLIO

This section brings together the concepts of risk and return. Portfolio management recognizes the fact that while future returns are usually beyond the control of an individual or fund manager, risk to a certain extent can be managed.

Portfolio management stresses the selection of securities for inclusion in the portfolio based on the securities' contribution to the portfolio as a whole. This suggests some synergy or some interaction among the securities that results in the total portfolio being somewhat more than the sum of the parts.

If investors place all of their savings in a single security their entire portfolio is at risk. If the investment consists of a single equity security, the investment is subject to business risk and market risk. Alternatively, if all of the investor's funds are invested in a single debt security, the investment is subject to default risk and interest rate risk.

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Some of these risks can be eliminated or reduced through diversification. However, diversification must be done carefully and the methodology for combining securities must be understood. Combining any two securities may not diversify the portfolio if the risk characteristics of the two securities are extremely similar.

CORRELATION

Correlation is the statistical measure of how the returns on two securities move together over time and, therefore, how a change to the value of one security can predict the change in value of another. From a portfolio perspective, we are interested in the way securities relate to each other when they are added to a portfolio, and to how the resulting combination affects the portfolio's total risk and return.. To illustrate the concept, consider the following:

- An investor takes all of her savings and invests 100% of those savings in a gold mining stock. If the price of gold rises, the company does well and the client makes money. If the price of gold declines, the gold-mining company does not do well and the investor loses money. In order to reduce this risk, the investor diversifies into another stock, which happens to be another gold mining company. Has the investor's portfolio been diversified?
- The investor's advisor points out that the portfolio has not been adequately diversified.

It is clear that the securities in the portfolio are linked – their value is tied to the fortunes of gold. The portfolio thus has a high correlation with the fortunes of gold. In fact:

- If the stock prices of the two gold mining companies move in the same direction and in the same proportion each time, they would have a perfect positive correlation, which is denoted as a correlation of +1.
- The investor does not reduce his or her risk by adding securities that are perfectly correlated with each other.
- Therefore, holding securities with **perfect positive correlation** does not reduce the overall risk of the portfolio.

What if the stock prices of two companies moved in opposite directions? Consider the following example:

- An investor creates a portfolio of two securities – an airline company stock and a bus company stock. In good economic times people fly, but in bad economic times they save money by taking the bus. In good times, the investor's airline company shares increase in value. In bad times, the airline stock declines but the loss is offset by an increase in the price of bus company shares.
- Since the stock prices move in the opposite direction and in the same proportion each time (when one rises, the other falls), the investor earns a positive return with little risk (there is always the possibility of market risk). These securities have a perfect negative correlation, denoted as –1.

With **perfect negative correlation**, there is no variability in the total returns for the two assets – thus, no risk for the portfolio. Therefore, the maximum gain from diversification is achieved when securities held within the portfolio exhibit perfect negative correlation. In reality, however, it is very difficult to find securities with such a high level of negative correlation.

Research shows that adding poorly correlated securities to a portfolio does in fact reduce risk. However, each additional security reduces risk at a lower rate. Since the securities in the portfolio are still positively correlated to some degree, the equity portfolio is left with one risk that cannot be eliminated – systematic or market risk.

Figure 8.4 shows how risk is reduced by adding securities to an equity portfolio.

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Figure 8.4 | Risk in an Equity Portfolio

The total risk of the portfolio falls quite significantly as the first few stocks are added. As the number of stocks increases, however, the additional reduction in risk declines. Finally, a point is reached where a further reduction in risk through diversification cannot be achieved. Therefore, the main source of uncertainty for an investor with a diversified portfolio is the impact of systematic risk on portfolio return.

PORTFOLIO BETA

As explained, the beta or *beta coefficient* relates the volatility of a single equity or equity portfolio to the volatility of the stock market as a whole. Specifically, beta measures that part of the fluctuation in returns driven by changes in the stock market. Volatility in this context is a way of describing the changes in returns over a long-time frame. The wider the range in market returns, the greater the volatility and the greater the risk.

Any equity or equity portfolio that moves up or down to the same degree as the stock market has a beta of 1.0. Any security or portfolio that moves up or down more than the market has a beta greater than 1.0, and a security that moves less than the market has a beta of less than 1.0.

- If the S&P/TSX Composite Index rose 10%, an equity fund with a beta of 1.0 could be expected to advance by 10%.
- If the Index fell by 5%, the equity fund with a beta of 1.0 would fall by 5%.
- If an equity portfolio had a beta of 1.30, it would be expected to rise 13% (1.3 times the index variation, or 1.3 × 10%) when the Index rose 10%.
- An equity portfolio with a beta of 0.80 would be expected to rise only 8% when the Index rose 10%.

Most portfolio betas indicate a positive correlation between equities and the stock market. Industries with volatile earnings, typically cyclical industries, tend to have higher betas than the market.

Defensive industries tend to have betas that are less than the market, that is, less than 1. This implies that when the market is falling in price, defensive stocks would normally fall relatively less and cyclical stocks relatively more.

Simplistically, it could be stated that in a rising market it is better to have high beta stocks and in a falling market it is better to have defensive, low beta stocks. However, this is an over-generalization and presumes that history repeats itself.

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PORTFOLIO ALPHA

Quite often, equity portfolios outperform the market and move more than would be expected from their beta. The additional movement is due to the advisor's or fund manager's skill in picking those securities that will outperform. This is known as **alpha** – the excess return earned on the portfolio.

RISK AND RETURN

How does the mix of securities in a portfolio affect both the risk and return of the portfolio?
Complete the online learning activity to assess your knowledge.

HOW ARE PORTFOLIOS MANAGED?

The initial construction of an investment portfolio is the first step. The manager then must decide what changes should be made to the portfolio. This means deciding what individual securities to sell and buy and what sector weightings to use and the asset allocation, based on changes in the economy. **Portfolio managers** engage in this activity day-to-day using knowledge of the financial marketplace and personal management style.

Some managers do not believe it is possible to "beat the market." They tend to hold well-diversified portfolios and avoid the temptation of trying to pick individual stocks that might turn out to be winners. Other managers believe the marketplace is full of buying opportunities, with many undervalued stocks just waiting to be discovered. Undervalued stocks offer the possibility of excess returns: returns above those needed to compensate for risk.

The difference between these two management styles is really a question of whether the portfolio manager believes that the financial marketplace is **efficient**. If markets are efficient, then the prices of stocks and other securities listed in the newspaper reflect all the information that exists about them. If you buy those securities, the best return you can hope for is compensation for risk. If markets are less than efficient, however, then some prices listed will not completely reflect all information. You might have some favourable information that the market has not yet received or digested. If so, you could buy a security at its current price, wait for the market to catch on and bid up its price, and then sell the security at the new price to make an excess return.

To beat the market like this, you would need some type of advantage that other investors do not have. For example, you could be unusually skillful in identifying undervalued securities. Alternatively, you could have a friend in high places who provides you with inside information of material significance that has not yet been made public. However, this constitutes illegal **insider trading** and this will expose you to legal action.

Nevertheless, if markets were completely efficient there would be no justification for **active portfolio management**, which involves seeking out information to find securities that are under- or over-valued. Active managers try to outperform the market benchmarks by changing the portfolio asset allocation, often using a strategy called **market timing**.

In a market timing strategy, the manager tries to time the shift from one class of security to another depending on anticipated changes in the economy, the business cycle, industries, and companies. It is the basic strategy of some balanced mutual funds. In theory, market timing is easy. In practice, however, timers often change their asset allocation either too early or too late.

If the manager believes markets are completely efficient, they would simply invest in a stock market (or bond market) index. This is the approach taken using **passive portfolio management** where the portfolio manager does not try to earn excess returns. Passive managers simply buy and hold an underlying stock or bond index.

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INVESTMENT OBJECTIVES

For professionally managed portfolios such as pension funds and mutual funds, portfolio investment objectives are often stated in terms of the types of return that the portfolio should generate. One portfolio, for example, might have a goal of earning current income only. Another might have the goal of earning some mixture of capital gains, interest income and dividend income. Investors must take greater risks to earn capital gains than dividend income, and more risk to earn dividend income than interest income. As a result, stating the types of return that the portfolio should earn is really a statement about the risk level of the portfolio.

Portfolio investment objectives must eventually be translated into a specific selection of individual securities, but this is not the most important decision made by the portfolio manager. The single most important decision, one that accounts for most of the success or failure of a portfolio, is the **asset allocation** decision, which is the selection of the classes of securities to be held and in what proportion to hold them.

EXAMPLE

The manager of the XYZ Growth Fund has decided that an asset mix of 5% cash, 10% high-yield bonds, and 85% equities is the optimal mix that will generate superior returns for the portfolio.

The next most important decision is the selection of the specific industries from which stocks will be selected: the portfolio's **sector weighting**. For example, the S&P/TSX Composite Index includes 11 industry sectors including energy, financials, technology, health care, materials, utilities, and telecommunications among others.

Selecting asset classes, asset allocations and sector weightings is one way of developing an investment portfolio at an appropriate level of risk. Another approach is developing a base policy asset mix that the manager will follow over time to meet portfolio goals. This approach is referred to as selecting the strategic asset allocation.

STRATEGIC ASSET ALLOCATION

When a portfolio manager develops a strategy to maximize portfolio returns, he or she does so with a particular asset mix or allocation in mind. For example, 60% equities and 40% bonds, or 10% cash, 40% bonds, and 50% equities, and so on.

This base policy mix is called the **strategic asset allocation**. This is the long-term mix that will be adhered to by monitoring and, when necessary, rebalancing. To find this base policy mix, the portfolio manager will analyze a variety of asset mixes to determine the optimal portfolio. The manager then reviews the range of outcomes and chooses one to determine the long-term policy or strategic asset allocation.

Strategic asset allocation is the basis of most in-house "model portfolios" suggested by investment managers. Once the manager determines the optimal weighting of the combination of all the funds it offers for sale, you need only determine the client's ability to bear investment risk. Combine these two efforts and you have the best possible asset allocation to recommend for the client. The strategic asset allocation for a client ultimately will be determined through the models and systems in place at your financial institution.

A client may reject the strategic asset allocation in favour of an asset allocation he or she has determined. If the "know your client" data and the client's request show an acceptable fit, then you can process the request, while at the same time indicating to the client that your financial institution does not recommend the requested asset allocation. If the fit is not right, however, then you may not process the request.

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WHAT ARE THE METHODS OF ANALYSIS?

Security analysis is the evaluation of the risk and return characteristics of securities. Almost all investors, individual and professional, do some type of analysis before making a security purchase or sale. For individual investors, time often limits the depth of analysis and the process tends to be informal. For professional investors, their careers depend upon their ability to do good security analysis.

Two basic types of security analysis are fundamental analysis and technical analysis. Both are in widespread use in the investment community, each approach offers very different views of how the financial system operates.

FUNDAMENTAL ANALYSIS

Fundamental analysis involves assessing the short-, medium- and long-range prospects of different industries and companies. It involves studying capital market conditions and the outlook for the national economy and for the economies of countries with which Canada trades to shed light on securities' prices.

In fact, fundamental analysis means studying everything, other than the trading on the securities markets, which can have an impact on a security's value: macroeconomic factors, industry conditions, individual company financial conditions, and qualitative factors such as management performance.

By far the most important single factor affecting the price of a corporate security is the actual or expected profitability of the issuer. Are its profits sufficient to service its debt, to pay current dividends, or to pay larger dividends? Fundamental analysis pays attention to a company's:

- Debt-equity ratio, profit margins, dividend payout, earnings per share,
- Interest and asset coverage ratios,
- Sales penetration, market share, product or marketing innovation, and the quality of its management.

TECHNICAL ANALYSIS

Technical analysis is the study of historical stock prices and stock market behaviour to identify recurring patterns in the data. Because the process requires large amounts of information, it is often ignored by fundamental analysts, who find the process too cumbersome and time consuming, or believe that "history does not repeat itself."

Technical analysts study price movements, trading volumes, and data on the number of rising and falling stock issues over time looking for recurring patterns that will allow them to predict future stock price movements. Technical analysts believe that by studying the "price action" of the market, they will have better insights into the emotions and psychology of investors. They contend that because most investors fail to learn from their mistakes, identifiable patterns exist.

In times of uncertainty, other factors such as mass investor psychology and the influence of program trading (sophisticated computerized trading strategies) also affect market prices. This can make the technical analyst's job much more difficult. Mass investor psychology may cause investors to act irrationally. Greed can force prices to rise to a level far higher than warranted by anticipated earnings. Conversely, uncertainty can also cause investors to overreact to news and sell quickly, causing prices to drop suddenly.

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SUMMARY

1. Describe the basic concepts of return and risk and explain how they are used to evaluate the risk profile of mutual fund investments.
   - Given a choice between two investments with the same amount of risk, a rational investor would always take the security with the higher return. Given two investments with the same expected return, the investor would always choose the security with the lower risk.
   - Given that all investors do not have the same risk profile, different securities and different funds have evolved to service each market niche.
2. Define inflation and purchasing power and the role taxation plays when comparing the risk and return of securities.
   - Inflation is a generalized, sustained trend of rising prices. When prices are rising, money begins to lose its value—that is, more and more money is needed to buy the same amount of goods and services.
   - Purchasing power is the ability to buy goods and services.
   - The difference between just keeping up with inflation and generating positive real returns represents an increase in the investor's wealth.
   - The tax rate to be paid on investment income depends on the type of income generated. The three types are interest income, dividend income, and capital gains.
3. Calculate the return on a security.
   - You can calculate the return (R) on a security held for one year as:

$$\text{Return \%} = \frac{\text{Cash Flow} + (\text{Ending Value} - \text{Beginning Value})}{\text{Beginning Value}} \times 100$$

   - The geometric mean return calculates the average annual compound return over several time periods and is calculated as follows:

$$GMR_i = \left[(1 + R_{i,1}) \times (1 + R_{i,2}) \times \ldots \times (1 + R_{i,T})\right]^{1/T} - 1$$

   - The return on a portfolio is calculated as the weighted average return on the securities held in the portfolio. The formula is as follows:

     Expected Return $= R_1(W_1) + R_2(W_2) + \ldots + R_n(W_n)$
4. Calculate the risk of a security.
   - Variance measures the extent to which the spread of possible returns on a security differs from the expected return (the mean). The more likely it is that the return will not be the same as the expected return, the riskier the security.
   - Standard deviation is the measure of risk commonly applied both to portfolios and to individual securities within a portfolio. It is the square root of the variance and is expressed as a percentage.
   - Beta measures the degree to which individual equity securities or a portfolio of equities tend to move up and down with the market.
   - Duration is a measure of the sensitivity of a bond's price to changes in interest rates. It is defined as the approximate percentage change in the price or value of a bond for a 1% change in interest rates.

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5. Define portfolio analysis and explain the role of diversification, describe the concept of correlation, and describe the tool used to measure risk in a portfolio.
   - Diversification refers to the spreading of investment risk by buying different types of securities in different companies in different kinds of businesses and or locations.
   - The selection of securities within a portfolio must be done carefully in order to maximize returns while reducing risk.
   - Correlation looks at how securities relate to each other when they are added to a portfolio and how the resulting combination affects the portfolio's total risk and return.
6. Describe the concept of efficient markets and how strategic asset allocation is used to determine an optimal portfolio mix.
   - If markets are efficient, then the prices of stocks and other securities listed in the newspaper reflect all the information that exists about them.
   - The single most important decision, one that accounts for most of the success or failure of a portfolio, is the asset allocation decision, which is the selection of the classes of securities to be held and in what proportion to hold them.
   - This base policy mix is called the strategic asset allocation. This is the long-term mix that will be adhered to by monitoring and, when necessary, rebalancing.
7. Describe how fundamental analysis and technical analysis are used in the selection of securities.
   - Security analysis is the evaluation of the risk and return characteristics of securities.
   - Fundamental analysis involves assessing the short-, medium- and long-term prospects of different industries and companies. It involves studying capital market conditions and the outlook for the national economy.
   - Technical analysis is the study of historical stock prices and stock market behaviour to identify recurring patterns in the data.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 8 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 8 FAQs.

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Understanding Financial Statements

9

CONTENT AREAS

- **What Are the Financial Statements?**
- **What Is the Statement of Financial Position?**
- **What Is the Statement of Comprehensive Income?**
- **What Is the Statement of Changes in Equity?**
- **What Is Financial Statement Analysis?**
- **Appendix A: XYZ Inc. Financial Statements**

LEARNING OBJECTIVES

1 | Describe the format and the items of the Statement of Financial Position and explain how the items are classified.

2 | Describe the structure of the Statement of Comprehensive Income.

3 | Describe the purpose of the Statement of Changes in Equity and describe its link with the Statement of Financial Position and Statement of Comprehensive Income.

4 | Describe the different types of liquidity ratios, risk analysis ratios, operating performance ratios and value ratios, and evaluate company performance using these ratios.

5 | Explain how to analyze a company's financial statements using trend analysis and external comparisons.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

amortization

assets

audit

auditor's report

cash flow from operations/total debt ratio

current assets

current liabilities

current ratio

debt/equity ratio

depreciation

earnings per common share (EPS)

equity

financial statement analysis

fixed assets

gross profit

gross profit margin ratio

interest coverage ratio

inventory turnover ratio

liabilities

liquidity ratio

long-term liabilities

market ratios

net profit margin

operating performance ratios

price-earnings ratio (p/e)

profit

quick ratio

ratio analysis

retained earnings

return on common equity (ROE) ratio

risk analysis ratios

statement of changes in equity

statement of comprehensive income

statement of financial position

trend ratios

value ratios

working capital

working capital ratio

yield

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INTRODUCTION

So far in this course, you have been introduced to the types of securities included in mutual funds and the methods used by portfolio managers to construct portfolios of securities. This chapter presents one type of fundamental analysis: the company analysis performed by mutual fund portfolio managers when selecting securities for inclusion in the mutual funds they manage.

One of the jobs of a mutual fund portfolio manager is to assess the "true" value of the securities offered to the public by corporations. If that "true" value differs from the current market price, this is an indication of a buying or selling opportunity.

To assess the value of a stock, fund managers need information about the companies they want to invest in, particularly information about earnings (or profits) these companies are likely to generate in the future. Earnings information is the cornerstone of choosing stocks because the price one is willing to pay today for a share of a company depends directly on estimates of how profitable the company will be in the future.

If investors suddenly come to the conclusion that the future earnings of a company will be higher than was previously thought, that suggests the true value of the shares is higher than the price they may be trading for in the market today. Investors will likely buy these underpriced shares, bidding the price up until it reflects the new earnings forecast. In other words, the value of a share is primarily influenced by the company's expected future earnings.

Understanding the link between future earnings and share price is not that difficult, but trying to figure out what current information is relevant to determine what those future earnings might be can be a difficult task. Certainly, information about the company's products, competition, the skill of its managers, and the training and dedication of its workers is all relevant, and better analyses result when a close examination of all relevant factors is made. However, the financial statements produced by management, and verified (or audited) by accounting firms, provide good summaries of how well the company has done in the recent past.

While a complete treatment of **financial statement analysis** is far beyond the scope of this course, it will serve you well to be familiar with at least some basic concepts. Understanding some aspects of the security selection process will give you insight into the difficulty mutual fund portfolio managers have in always making good choices.

WHAT ARE THE FINANCIAL STATEMENTS?

Before we can discuss the tools of financial statement analysis, we start with the basics of financial statements. Throughout our discussion, we will refer to the set of financial statements of XYZ Corporation, a fictional company, included in Appendix A of this chapter. These financial statements are highly simplified in order to allow you to focus on a few key elements. Real financial statements are far more complex and are not presented here.

Financial statements of publicly traded companies in Canada are produced according to International Financial Reporting Standards (IFRS). IFRS is a globally accepted high-quality accounting standard already used by public companies in over 100 countries around the world. IFRS is principle-based, with a focus on providing detailed disclosure.

In principle-based accounting, guidelines are more general because the goal is to have the completed financial statements achieve a set of good reporting objectives. An example of a good reporting objective is sufficient disclosure of data so that an investor can make an objective analysis.

IFRS requires an extensive and detailed disclosure by the company to explain why particular accounting treatments are utilized.

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There are four essential financial statements produced by corporations:

- the Statement of Financial Position
- the Statement of Comprehensive Income
- the Statement of Changes in Equity
- the Statement of Cash flow

While all four of these financial statements are important indicators of the performance of the company, we will look at only some of the key elements of the first three of these.

WHAT IS THE STATEMENT OF FINANCIAL POSITION?

The **statement of financial position** shows a company's financial position at a specific date. In annual reports, that date is the last day of the company's fiscal year. While many companies have a fiscal year end that corresponds with the calendar year end, i.e., December 31, this is not always the case.

EXAMPLE

Banks and trust companies traditionally end their fiscal year on October 31. In this instance, October 2024 would be the last month of the bank's "fiscal 2024" while November 2024 would represent the first month of "fiscal 2025."

The statement of financial position shows what the company owns and what is owing to it. These items are called **assets**. This statement also shows the **equity** of the company which represents the shareholders' interest in the company and what the company owes (called **liabilities**). Equity represents the excess of the company's assets over its liabilities. Accordingly, the company's total assets are equal to the sum of equity plus the company's liabilities.

A statement of financial position is prepared and presented in more or less the same way for all Canadian publicly traded companies.

Assets, liabilities and shareholders' equity are related by the following equation:

Assets = Equity + Liabilities

For XYZ Inc., total assets ($520,000) equal shareholders' equity ($240,000) plus liabilities ($280,000).

ASSETS

Assets are classified as either current or fixed, with the dividing point usually being one year. **Current assets** are assets that are expected to be converted to cash within one year, although this conversion might be indirect.

For example, consider trade receivables. Trade receivables represent the amounts owed to the company by clients who have bought goods but haven't paid for them yet. For the vast majority of businesses, the average invoice is paid well within one year. Therefore, trade receivables are considered current assets because they will normally be paid and converted to cash within one year.

While most companies will report many different kinds of current assets, there are only three current asset accounts for XYZ: cash, representing the total amount in all of the company's deposit accounts; inventories, representing the finished and unfinished products which have not yet been sold; and trade receivables.

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From the Statement of Financial Position, current assets for XYZ total $120,000.

Current Assets	
Cash	$20,000
Inventories	60,000
Trade Receivables	40,000
Total Current Assets	**$120,000**

Fixed assets are those assets that are expected to last longer than one year. These are long-term assets used in the day-to-day operations of a company to produce the goods or services the company sells. They are not intended to be sold. Examples are automobiles, trucks, factories, computers and other office equipment.

Since these assets last several accounting periods (years), it is only reasonable to adjust the values of those assets to reflect the fact that a certain amount is used up each period. With the exception of land, assets wear out over time or otherwise lose their usefulness. This used-up amount is known as **depreciation** or **amortization**.

On the XYZ Statement of Financial Position, fixed assets are shown as "net" plant and equipment. The term "net" means that depreciation has been removed from the original value of the fixed assets. Total fixed assets for XYZ is $400,000.

Fixed Assets	
Net Plant and Equipment	400,000

Note that total assets for XYZ is the sum of current and fixed assets, or $520,000.

LIABILITIES

As with assets, liabilities are classified as either current or long-term, with the same one-year dividing line. There are three **current liabilities** for XYZ.

The first, trade payables are the mirror image of the trade receivables seen on the asset section of the Statement of Financial Position. Trade payables represent the goods the company has bought for which payment has not yet been made. Notes payable represent loans that must be paid off by the company within one year. The last current liability account for XYZ is accrued charges. This account represents wages earned by employees but not yet paid, or taxes payable to the federal or provincial governments.

From the Statement of Financial Position, current liabilities for XYZ total $80,000.

Current Liabilities	
Trade Payables	$20,000
Notes Payable	40,000
Accrued Charges	20,000
Total Current Liabilities	**$80,000**

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Long-term liabilities are liabilities not likely to be paid off within one year; such is the case for long-term debt. This debt could be in the form of bonds issued by the corporation or a term loan made by a lender. The notes to the financial statements would be consulted to determine the precise composition of the debt. With long-term liabilities of $200,000 added to the current liabilities, XYZ's total liabilities are $280,000.

SHAREHOLDERS' EQUITY

Shareholders' equity refers to the amount contributed to the financing of the company by shareholders over time by one of two means.

- First, shareholders might have contributed by buying shares from the company when they were first issued in the primary market; that is the amount indicated in the common shares account.
- Second, all of the company's annual profits that have not been distributed to shareholders (generally in the forms of dividends) but reinvested in the company continue to accumulate in shareholders' equity over time: these are known as **retained earnings**. This decision to reinvest some of the profit comes from the company's board of directors.

From the Statement of Financial Position, total shareholders' equity for XYZ is $240,000.

Shareholders' Equity	
Common Shares (100,000 outstanding shares)	$40,000
Retained Earnings	200,000
Total Shareholders' Equity	**$240,000**

Therefore, the total of liabilities and shareholders' equity is $520,000, exactly equal to the total asset figure indicated above.

WHAT IS THE STATEMENT OF COMPREHENSIVE INCOME?

Unlike the Statement of Financial Position, which shows what a company owns and owes at a single point in time, the **statement of comprehensive income** presents revenues and expenses over a specific period. In the case of XYZ, the period is one-year. Publicly traded companies provide shareholders with quarterly and annual financial statements. In that case, the Statement of Comprehensive Income will be over a three-month or a one-year period.

All Statement of Comprehensive Incomes show the revenue generated for the period and then reduce that amount by charging off expenses of one kind or another. For XYZ, sales are reduced by the expenses that were incurred in order to generate the goods sold (Cost of Sales). These expenses include the cost of inventories used to produce the goods as well as the labour that went into their production. The revenue, net of the cost of sales (the cost of producing those goods), is known as **gross profit**.

From the Statement of Comprehensive Income, the gross profit for XYZ is $400,000.

Revenue	$1,000,000
Less: Cost of Sales	600,000
Gross Profit	**$400,000**

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Then, calculate all expenses.

Expenses	
General and Administrative	$200,000
Selling Expense	50,000
Depreciation	25,000
Interest Expense	20,000
Taxes	50,000
Total Expenses	**345,000**

From gross profit, subtract all expenses which leave **profit**.

The profit for XYZ is $55,000.

Gross Profit	$400,000
Less: Total Expenses	345,000
Profit	**$55,000**

WHAT IS THE STATEMENT OF CHANGES IN EQUITY?

The profit or loss in a company's most recent year is determined in the Statement of Comprehensive Income and then transferred to the **statement of changes in equity**. Retained earnings are profits earned over the years that have not been paid out to shareholders as dividends. These retained profits accrue to the shareholders, but the directors have decided for the present time to reinvest them in the business.

The Statement of Changes in Equity is the link between the Statement of Comprehensive Income and the Statement of Financial Position as it makes the bridge between the yearly earnings that appear in the Statement of Comprehensive Income and the retained earnings that appear in the Statement of Financial Position.

This statement starts with the opening balance (January 1, 20XX) of the retained earnings account. This is the same amount as the retained earnings from the December 31, previous year's Statement of Financial Position. Since XYZ has earned $55,000 from this year's activities after all goods, workers, managers, creditors and taxes have been paid, it only stands to reason that this additional amount belongs to the shareholders. Thus, retained earnings should increase by $55,000.

Notice, however, that the board of directors paid a dividend on its common shares. Of the $55,000 earned, $30,000 has been paid out in cash in the form of common share dividends (100,000 shares outstanding × $0.30 per share).

Retained Earnings at beginning of period	$175,000
Plus: Profit for the period	55,000
Less: Dividends paid on common shares	30,000
Retained Earnings at end of period	**$200,000**

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Therefore, retained earnings have grown by a total of $25,000. Since the year began with a retained earnings account balance of $175,000, the account balance at the end of this year should be $200,000 — and that is exactly what is shown on the Statement of Financial Position as at the end of the year. If the company experiences a loss instead of a profit, retained earnings are reduced by the amount of the loss.

THE AUDITOR'S REPORT

Canadian corporate law requires that every limited company appoint an auditor to represent shareholders and report to them annually on the company's financial statements, expressing an opinion in writing as to their fairness. The only exception is for privately held corporations where all shareholders have agreed that an **audit** is not necessary. The auditor is appointed at the company's annual meeting by a resolution of the shareholders and may be dismissed by them.

In Canada the **auditor's report** conventionally has four sections:

- The introductory section identifies the financial statements covered by the auditor's report.
- The second section outlines the financial statement responsibilities of management.
- The third section outlines the auditor's responsibilities and states how the audit was conducted. The purpose of the third section is for the auditor to inform the reader that the audit was planned and conducted in accordance with international auditing standards and that the auditor has made judgments in applying these standards. It explains to the reader the nature and extent of an audit.
- The fourth section gives the auditor's opinion on the financial statements of the company being audited. This paragraph provides a statement on the fairness of the company's financial statements presented in accordance with International Financial Reporting Standards.

FINANCIAL STATEMENTS REVIEW

How well do you understand the key purpose of the various financial statements? *Complete the online learning activity to assess your knowledge.*

WHAT IS FINANCIAL STATEMENT ANALYSIS?

Mutual fund managers rely extensively on the financial statements of companies they want to invest in. Their job is to find companies that will outperform their peers within an industry. In order to achieve this, fund managers must have an extensive knowledge of the industry, but they also must be able to analyze and interpret financial statements. Ratio analysis is one type of investment tool to perform this analysis.

RATIO ANALYSIS

The method most commonly used to evaluate financial statements is called **ratio analysis**, which shows the relationship between two quantities. For instance, a 2:1 ratio means that the first quantity is twice the amount of the second quantity.

EXAMPLE

A company with $100,000 in current assets and $50,000 in current liabilities is said to have a 2:1 ratio, or $2 of current assets for $1 of current liabilities. This ratio is the working capital ratio, which we discuss below.

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In the context of financial analysis, ratios may be used to analyze a company's liquidity, debt, return and stock value. The four main types of ratios commonly used in financial analysis are:

- **Liquidity ratios** are used to judge the company's ability to meet its short-term commitments. An example is the **working capital ratio**, which shows the relationship between current assets and current liabilities.
- **Risk analysis ratios** show how well the company can deal with its debt obligations. For example, the debt/equity ratio shows the relationship between the company's borrowing and the capital invested in it by shareholders.
- **Operating performance ratios** illustrate how well management is making use of the company's resources. The return on common equity, for example, correlates the company's profit with the money shareholders have invested to produce it. These ratios include profitability and efficiency measures.
- **Value ratios** show the investor what the company's shares are worth, or the return on owning them. An example is the price-earnings ratio, which links the market price of a common share to earnings per common share, and thus allows investors to rate the shares of companies within the same industry.

Ratios must be used in context. One ratio alone does not tell an investor very much. Ratios are not proof of present or future profitability; they are only clues. An analyst who spots an unsatisfactory ratio may suspect unfavourable conditions. Conversely, analysts may conclude that a company is financially strong after compiling a series of ratios.

The significance of any ratio is not the same for all companies. A ratio that compares company inventory does not have the same meaning for a company that builds planes, for example, as it does for a bakery shop. To be meaningful, company ratios must be compared with similar companies or within a similar industry.

LIQUIDITY RATIOS

Liquidity ratios help analysts to evaluate the ability of a company to turn current assets into cash to meet its short-term obligations. If a company is to remain solvent, it must be able to meet its current liabilities, and therefore it must have an adequate amount of working capital.

WORKING CAPITAL RATIO OR CURRENT RATIO

The ability of a company to meet its obligations, expand its volume of business, and take advantage of financial opportunities as they arise is, to a large extent, determined by its **working capital** or **current ratio** position. Frequent causes of business failure are the lack of sufficient working capital and the inability to liquidate current assets readily.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

For XYZ:

$$\text{Current Ratio} = \frac{\$120{,}000}{\$80{,}000}$$

XYZ's current ratio is 1.5:1 which means there is $1.50 of current assets for each dollar of current liabilities.

As discussed earlier, current assets are cash and other company possessions that can be readily turned into cash within one year. Current liabilities are liabilities of the company that must be paid within the year.

The interpretation of this ratio depends on the type of business, the composition of current assets, inventory turnover rate and credit terms. A current ratio of 2:1 is generally considered good but not exceptional because it means the company has $2 cash and equivalents to pay for each $1 of its debt. However, the composition of current assets is also an important factor to assess the quality of the ratio.

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EXAMPLE

Company A reports current assets of 50% cash, 25% trade receivables, and 25% inventory. Company B reports 10% cash, 10% trade receivables, and 80% inventory. Both companies have a current ratio of 2:1, but which company is in a better position in terms of liquidity? Company A is in a better liquidity position than Company B. Company A could pay its current debts more easily and quickly.

Also, if a current ratio of 2:1 is good, is a 20:1 current ratio ten times as good? No. If a company's current ratio exceeds 5:1 and it consistently maintains such a high level, the company may have an unnecessary accumulation of funds that could indicate sales problems (too much inventory) or financial mismanagement.

QUICK RATIO (THE ACID TEST)

The second of the two most common corporate liquidity ratios, the **quick ratio**, is a more stringent test than the current ratio. In this calculation, inventories, which are generally not considered liquid assets, are subtracted from current assets. The quick ratio shows how well current liabilities are covered by cash and by items with a quick cash value.

Current assets include inventories that, at times, may be difficult to convert into cash. As well, because of changing market conditions, inventories may be carried on the Statement of Financial Position at inflated values.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

XYZ's quick ratio is 0.75:1:

$$\text{Quick Ratio} = \frac{\$120{,}000 - \$60{,}000}{\$80{,}000}$$

The quick ratio offers a more conservative test of a company's ability to meet its current obligations. For XYZ, the ratio is 0.75 to 1, which means there are $0.75 of current assets, exclusive of inventories, to meet each $1 of current liabilities.

There is no absolute standard for this ratio, but if it is 1:1 or better, it suggests a good liquid position. However, companies with a quick ratio of less than 1:1 may be equally good if they have a high rate of inventory turnover because inventory that is turned over quickly is the equivalent of cash.

FINANCIAL LEVERAGE (RISK ANALYSIS RATIOS)

The capital structure of any company is made up of two elements: equity and debt. The analysis of a company's capital structure enables analysts to judge how well the company can meet its financial obligations. Excessive borrowing increases the company's costs because it must service its debt by paying interest on outstanding bank loans, notes payable, bonds or debentures.

If a company cannot generate enough cash to pay the interest on its outstanding debt, then its creditors could force it into bankruptcy. If the company must sell off its assets to meet its obligations, then investors who have purchased bonds, debentures or stock in the company could lose some or all of their investment. Risk analysis ratios are mainly used to assess the weighting of debt in a company, the company's ability to regularly pay interest due on its debt, and if the company will be able to fully reimburse debtholders in the event of bankruptcy.

DEBT/EQUITY RATIO

The **debt/equity ratio** pinpoints the relationship of debt to equity. If the ratio is too high, it may indicate that a company has borrowed excessively. Financial risk increases as the debt/equity ratio goes higher. If the debt burden is too large, it reduces the margin of safety protecting the debtholder's capital, increases the company's fixed

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charges, reduces earnings available for dividends, and, in times of recession or high interest rates, could cause a financial crisis.

$$\text{Debt/Equity Ratio} = \frac{\text{Total Debt Outstanding}(\text{Short- + Long-Term Debt})}{\text{Equity}}$$

XYZ's debt/equity ratio is 1:1:

$$\text{Debt/Equity Ratio} = \frac{\$40{,}000 + \$200{,}000}{\$240{,}000}$$

You can interpret this result as $1.00 of debt for each dollar of equity. Creditors would normally not lend money to companies that show a debt/equity ratio that exceeds 0.50:1. XYZ seems to be largely financed by debt, which may indicate that debt is excessive.

CASH FLOW FROM OPERATIONS/TOTAL DEBT RATIO

The **cash flow from operations/total debt ratio** gauges a company's ability to repay the funds it has borrowed. Bank advances are short-term and must normally be repaid or rolled over within a year. Corporate debt issues commonly have sinking funds requiring annual cash outlays. A company's annual cash flow should therefore be adequate to meet these commitments.

Before calculating this ratio, it is important to define cash flow from operations and consider its significance.

Cash flow from operations = a company's profit + all deductions not requiring a cash outlay (such as depreciation) – all additions not received in cash (such as share of profit of associates).

$$\text{Cash Flow From Operations/Total Debt Ratio} = \frac{\text{Cash Flow From Operations}}{\text{Total Debt Outstanding (Short- + Long-Term Debt)}}$$

XYZ's cash flow from operations/total debt ratio is 0.33:1 (net earnings + depreciation)/$240,000.

$$\text{Cash Flow From Operations/Total Debt Ratio} = \frac{\$55{,}000 + \$25{,}000}{\$240{,}000}$$

Cash flow from operations frequently provides a broader picture of a company's earning power than profit alone. Why? Some accounts are considered expenses and are deducted from earnings to get to profit, but do not incur any cash outflows. For example, depreciation is an expense that reduces profit, but no actual cash amount has been paid out for that account. Consequently, cash flow from operations is considered by some analysts a better indicator of the ability to repay debts and other liabilities like dividends. It is particularly useful in comparing companies within the same industry. It can reveal whether a company, even one that shows little or no profit after depreciation, can meet its debts.

A relatively high ratio of cash flow to debt is considered positive. Conversely, a low ratio is negative. Analysts use minimum standards to assess debt repayment capacity and provide another perspective on debt evaluation.

Analysts usually calculate the cash flow from operations to the total debt outstanding ratio for each of the last five fiscal years. An improving trend is desirable. A declining trend may indicate weakening financial strength, unless the individual ratios for each year are well above the minimum standards.

INTEREST COVERAGE RATIO

The **interest coverage ratio** reveals the ability of a company to pay the interest charges on its debt and indicates how well these charges are covered, based upon earnings available to pay them. Interest coverage indicates a margin of safety, since a company's failure to meet its interest charges could result in bankruptcy.

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All interest charges, including bank loans, and short-term and long-term debt must be taken into account to correctly assess interest coverage. Default on any one debt may impair the issuer's ability to meet its obligations to the others, and lead to default on other debts. Interest coverage is generally considered to be the most important quantitative test of risk when considering a debt security. A level of earnings well in excess of interest requirements is deemed necessary as a form of protection for possible adverse conditions in future years. Overall, the greater the coverage, the greater the margin of safety.

To assess the adequacy of the coverage, it is common to set criteria. For example, an analyst may decide that an industrial company's annual interest requirements in each of the last five years should be covered at least three times by earnings available for interest payment in each year. At this level, the analyst would consider its debt securities to be of acceptable investment quality.

A company may fail to meet these coverage standards without ever experiencing difficulties in fulfilling its debt obligations. However, the securities of such a company are considered a much higher risk because they lack an acceptable margin of safety. Thus, the interest coverage standards are only an indication of the likelihood that a company will be able to meet its interest obligations.

It is also important to study the year-to-year trend in the interest coverage calculation. Ideally, a company should not only meet the industry standards for coverage in each of the last five or more years but increase its coverage. A stable trend, which means that the company is meeting the minimum standards, but not improving the ratio over the period, is also considered acceptable. However, a deteriorating trend suggests that further analysis is required to determine whether the company's financial position has seriously weakened.

The formula for interest coverage is:

$$\text{Interest Coverage Ratio} = \frac{\text{Earnings Before Interest and Taxes}}{\text{Total Interest Charges}}$$

XYZ's interest coverage ratio is 6.25 times.

$$\text{XYZ's Interest Coverage Ratio} = \frac{\$55{,}000 + \$50{,}000 + \$20{,}000}{\$20{,}000}$$

The calculation shows that XYZ's interest charges for the year were covered 6.25 times by profit available to pay them. Stated in another way, XYZ had $6.25 of profit out of which to pay every $1.00 of interest.

OPERATING PERFORMANCE RATIOS

The analysis of a company's profitability and efficiency tells the investor how well management is making use of the company's resources. In other words, these ratios analyze management performance.

GROSS PROFIT MARGIN RATIO

The **gross profit margin ratio**, as well as the net profit margin ratio, is useful both for calculating internal trend lines and for making comparisons with other companies, especially in industries such as food products and cosmetics, where turnover is high and competition is stiff. The gross margin is an indication of the efficiency of management in turning over the company's goods at a profit. It shows the company's rate of profit after allowing for the Cost of Sales.

$$\text{Gross Profit Margin Ratio} = \frac{\text{Revenue} - \text{Cost of Sales}}{\text{Revenue}}$$

XYZ's gross profit margin ratio is 40%.

$$\text{XYZ Gross Profit Margin Ratio} = \frac{\$1{,}000{,}000 - \$600{,}000}{\$1{,}000{,}000}$$

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NET PROFIT MARGIN

Net profit margin is an important indicator of how efficiently the company is managed after taking both expenses and taxes into account. Because this ratio is the result of the company's operations for the period, it effectively sums up management's ability to run the business in a single figure.

$$\text{Net Profit Margin} = \frac{\text{Profit}}{\text{Revenue}}$$

NET (OR AFTER-TAX) RETURN ON COMMON EQUITY (ROE) RATIO

The **return on common equity** (ROE) represents the amount of profit returned as a percentage of shareholders' equity. ROE measures a company's profitability by revealing how much profit the company generates with the money shareholders have invested. The trend in the ROE indicates management's effectiveness in maintaining or increasing profitability in relation to the company's common equity capital. A declining trend suggests that operating efficiency is waning, although further quantitative analysis is needed to pinpoint the causes. For shareholders, a declining ratio shows that their investment is being employed less productively.

This ratio is very important for common shareholders, since it reflects the profitability of their capital in the business.

$$\text{Return on Common Equity Ratio} = \frac{\text{Profit}}{\text{Equity}}$$

XYZ's return on common equity ratio is 22.9%.

$$\text{XYZ Return on Common Equity Ratio} = \frac{\$55{,}000}{\$240{,}000}$$

INVENTORY TURNOVER RATIO

The **inventory turnover ratio** measures the number of times a company's inventory is turned over in a year. It may also be expressed as a number of days required to achieve turnover. A high turnover ratio is considered good. A company with a high turnover requires a smaller investment in inventory than one producing the same sales with a low turnover.

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Inventory}}$$

XYZ's inventory turnover ratio is 10 times.

$$\text{XYZ Inventory Turnover Ratio} = \frac{\$600{,}000}{\$60{,}000}$$

Over the course of a 365-day year, XYZ turned over its inventory 365/10 or once every 36.5 days. To be meaningful, the inventory turnover ratio should be calculated using the cost of sales. If this information is not shown separately, the revenue figure may have to be used.

This ratio indicates management's efficiency in turning over the company's inventory and can be used to compare one company with others in the same field. It also provides an indication of the adequacy of a company's inventory for the volume of business being handled.

If a company has an inventory turnover rate that is higher than its industry, it generally indicates a better balance between inventory and sales volume. The company is unlikely to be caught with too much inventory if the price of raw materials drops or the market demand for its products falls. There should also be less wastage because materials and products are not standing unused for long periods and deteriorating in quality and/or marketability.

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On the other hand, if inventory turnover is too high in relation to industry norms, the company may have problems with shortages of inventory, resulting in lost sales.

If a company has a low rate of inventory turnover, it may be because:

- the inventory contains an unusually large portion of unsaleable goods
- the company is holding excess inventory
- the value of the inventory has been overstated

Since a large part of a company's working capital is sometimes tied up in inventory, the way in which the inventory position is managed, directly affects earnings and the rate of return earned from the employment of the company's capital in the business.

VALUE RATIOS

Ratios in this group – sometimes called **market ratios** – measure the way the stock market rates a company by comparing the market price of its shares to information in its financial statements. Price alone does not tell analysts much about a company unless there is a common way to relate the price to dividends and earnings. Value ratios do this.

EARNINGS PER COMMON SHARE (EPS) RATIO

In common stock analysis, great emphasis is placed on **earnings per common share** (EPS). This ratio shows the earnings available to each common share and is an important element in judging an appropriate market price for buying or selling common stock. A rising trend in EPS has favourable implications for the price of a stock.

In practice, a common stock's market price reflects the anticipated trend in EPS for the next 12 to 24 months, rather than the current EPS. Thus it is common practice to estimate EPS for the next year or two. Accurate estimates for longer periods are difficult because of the many variables involved.

$$\text{Earnings per Common Share Ratio} = \frac{\text{Profit}}{\text{Number of Common Shares Outstanding}}$$

XYZ's earnings per common share ratio is $0.55

$$\text{XYZ Earnings per Common Share Ratio} = \frac{\$55{,}000}{100{,}000}$$

Because of the importance of EPS, analysts pay close attention to possible dilution of the stock's value caused by the conversion of outstanding convertible securities, the exercise of warrants, shares issued under employee stock options, and other changes.

Fully diluted earnings per share can be calculated on common stock outstanding plus common stock equivalents such as convertible preferred stock, convertible debentures, stock options (under employee stock-option plans) and warrants. This figure shows the dilution in earnings per share that would occur if all equivalent securities were converted into common shares.

Earnings from operations after all prior claims have been met belong to the common shareholders. The shareholders therefore will want to know how much has been earned on their shares. If profit is high, directors may declare and pay out a good portion as dividends. Even in growth companies, directors may decide to make at least a token payment because they realize that most shareholders like to feel some of the profits are flowing into their pockets. On the other hand, if profits are low or the company has suffered a loss, they may not pay dividends on the common shares.

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DIVIDEND YIELD

Common and preferred shares may pay dividends. The **yield** on common and preferred stocks is the annual dividend rate expressed as a percentage of the current market price of the stock. It represents the investor's return on the investment.

$$\text{Dividend yield} = \frac{\text{Annual dividend per share}}{\text{Current market price}}$$

PRICE-EARNINGS RATIO OR P/E MULTIPLE RATIO

The **price-earnings ratio or P/E ratio** is probably the most widely employed of all financial ratios because it combines all the other ratios into one figure. P/E ratio compares the company's current share price to its earnings per share.

$$\text{Price Earnings Ratio} = \frac{\text{Current Price of Common}}{\text{Earnings per Share}}$$

Assuming that the current market price of XYZ common stock is $5 and that its earnings per common share is $0.55, the P/E ratio is $5/$0.55 or 9.1.

The main reason for calculating earnings per common share – apart from indicating dividend protection – is to make a comparison with the share's market price. The P/E ratio expresses this comparison in one convenient figure, showing that a share is selling at so many times its actual or anticipated annual earnings. At a price of $5, XYZ common shares are selling at 9.1 times the company's earnings.

P/E ratios enable the shares of one company to be compared with those of another.

EXAMPLE

Company A – Earnings per share: $2; Price: $20

Company B – Earnings per share: $1; Price: $10

$$\text{P/E ratio for Company A: } \frac{\$20}{\$2} = 10$$

$$\text{P/E ratio for Company B: } \frac{\$10}{\$1} = 10$$

Though earnings per share of Company A ($2) are twice those of Company B ($1), the shares of each company represent equivalent value because Company A's shares, at $20 each, cost twice as much as Company B's shares. In other words, both companies are selling at 10 times earnings.

The elements that determine the quality of an issue – and therefore are represented in the P/E ratio – include:

- tangible factors contained in financial data, which can be expressed in ratios relating to liquidity, earnings trends, profitability, dividend payout, and financial strength (Statement of Financial Position ratios).
- intangible factors, such as quality of management, nature and prospects for the industry in which the issuing company operates, its competitive position, and its individual prospects.

All these factors are taken into account when investors and speculators collectively decide what price a share is worth.

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To compare the P/E ratio for one company's common shares with that of other companies, the companies should usually be in the same industry. P/E ratios for various industries are available from different sources. In practice, however, most investment analysts and companies make their own projections of a company's earnings for the next 12-month period and calculate P/E ratios on these projected figures in relation to the stock's current market price. Because of the many variables involved in forecasting earnings, the use of estimates in calculations should be approached with great caution.

The P/E ratio helps analysts to determine a reasonable value for a common stock at any time in a market cycle. By calculating a company's P/E ratio over a number of years, the analyst will find considerable fluctuation, with high and low points. If the highs and lows of a particular stock's P/E ratio remain constant over several stock market cycles, they indicate selling and buying points for the stock. A study of the P/E ratios of competitor companies and that of the relevant market subgroup index also helps to provide a perspective.

The P/E ratio comparison assists in the selection process.

EXAMPLE

Two companies of equal stature in the same industry and both have similar prospects, but different P/E ratios. The company with the lower P/E ratio is usually the better buy. As a rule, P/E ratios increase in a rising stock market or with rising earnings. The reverse is true in a declining market or when earnings decline.

Since the P/E ratio is an indicator of investor confidence, its highs and lows may vary from market cycle to market cycle. Much depends on changes in investor enthusiasm for a company or an industry over several years.

Some investors consider the P/E ratio as a timing device for stock transactions, but it should not be relied on exclusively and should be used only in conjunction with other criteria. The P/E ratio approach to stock selection assumes that an investor should buy a stock if its P/E ratio is close to the low of its historical range and sell when it is near its highest point.

Case Study | The Value of Advice: Using Market Ratios to Add Value for Investors (*for information purposes only*)

Jerry is meeting with his client, Anne, to discuss investing new money into her existing non-registered investment portfolio. As a balanced growth investor with a long-term investment time horizon, Anne is hoping that Jerry can recommend a mutual fund that is focused on stable growth and, for tax planning purposes, one that produces minimal but tax-effective income.

After reaffirming Anne's goals and investment profile, Jerry recommends to Anne a blue-chip equity fund, one that uses a value investing approach. Jerry explains that using a value investing approach can help reduce taxable short-term capitals gains distributions, as the fund manager takes a long term, buy-and-hold approach to investing, reducing short-term investment turnover. Holding blue chip equities often means that these companies pay dividends, and the fund Jerry recommends to Anne does have a dividend yield of around 3%. However, with capital appreciation, few capital gains distributions, and dividend income eligible for tax credits, the fund meets Anne's investment goals nicely.

Anne, a knowledgeable investor, is interested in how a value style fund manager analyses companies to identify opportunities. Jerry explains that these fund managers will often use value or market ratios to look for stocks that, based on their analysis, the market is undervaluing relative to their industry peers. They often do this by:

- Determining the company's *earnings per share ratio* and whether it is rising or falling: If a company's earnings are consistently rising, then it is likely that it is well-managed and well positioned in its industry to continue to produce solid earnings growth.

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Case Study | The Value of Advice: Using Market Ratios to Add Value for Investors (*for information purposes only*)

- Calculating the *dividend yield* to determine if the company's stock is over- or underpriced: Yields that are too high can suggest that the current price of a stock is too low relative to what the company pays out to investors – this can indicate that investors are under valuing the stock's price given the dividend cash flow per share.
- Examining the *price/earnings* (*P/E*) *ratio* to determine whether investors are over- or undervaluing the company's stock: A high P/E ratio often indicates that investors are paying too much for a company's future earnings relative to other companies' stocks, while a low P/E ratio relative to its industry peers can suggest that a company is out of favour with investors — representing a possible opportunity for a fund manager to buy it cheaply and wait for other investors to realize the same thing.

FINANCIAL RATIOS

How well do you know the purpose of the different financial ratios? *Complete the online learning activity to assess your knowledge*.

TREND ANALYSIS

Ratios calculated from a company's financial statements for only one year have limited value. They become meaningful when compared with other ratios either internally (with a series of similar ratios of the same company over a period) or externally (with comparable ratios of similar companies or with industry averages).

Analysts identify trends by selecting a base date or period, treating the figure or ratio for that period as 100, and then dividing it into the comparable ratios for subsequent periods.

Table 9.1 shows this calculation for a typical pulp and paper company:

Table 9.1 | Pulp and Paper Company A – Earnings Per Share

Year	Year 1	Year 2	Year 3	Year 4	Year 5
EPS	$1.18	$1.32	$1.73	$1.76	$1.99
	1.18	1.32	1.73	1.76	1.99
	1.18	1.18	1.18	1.18	1.18
Trend	100	112	147	149	169

The above example uses Year 1 as the base year. The earnings per share for that year, $1.18, is treated as equivalent to 100. The **trend ratios** for subsequent years are calculated by dividing 1.18 into the earnings per share ratio for each subsequent year.

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A similar trend line over the same period for Pulp and Paper Company B is shown in Table 9.2.

Table 9.2 | Pulp and Paper Company B – Earnings Per Share

Year	Year 1	Year 2	Year 3	Year 4	Year 5
EPS	$0.71	$0.80	$0.90	$0.84	$0.78
	.71	.80	.90	.84	.78
	.71	.71	.71	.71	.71
Trend	100	113	127	118	110

Trend ratio calculations are useful because they clearly show changes. Company A shows a steady earnings per share growth during the period, while Company B shows a decline in earnings for the recent years. While it is not always the case, these trends can help analysts to forecast future earnings.

EXTERNAL COMPARISONS

Ratios are most useful when comparing financial results of companies in the same or similar industries (such as comparing a distiller with a brewer). Differences shown by the trend lines not only help to put the earnings per share of each company in historical perspective, but also show how each company has fared in relation to others. Different industries may have different industry standards for the same ratio. In fact, a range is often employed rather than a specific target number.

In external comparisons, not only should the companies be similar in operation, but also the basis used to calculate each ratio compared should be the same. For example, there is no point comparing the inventory turnover ratios of two companies if one calculation uses "Cost of Sales" and the other uses "Revenue." This comparison would be inaccurate since the basis of calculation is different.

Determining which items on a financial statement should be included in a ratio can be difficult. An investor may not be able to make a valid comparison between comparing ABC Ltd. and DEF Ltd. if the research on each came from two different analysts. Different assumptions can result in one analyst including an item while an equally competent analyst may choose not to include it. For example, one analyst may include a bond maturing in five years as short-term debt while another analyst may consider that same security to be a long-term debt.

Because there is flexibility in calculating the ratios, two analysts could have differing opinions on the quality of an investment, depending on the assumptions that each made. In addition to comparisons between companies in the same industry, industry ratios can be used to compare the performance of individual companies. Industry ratios represent the average for that particular ratio of all the companies analyzed in that specific industry.

Evaluating a company should be made within the content of overall industry performance. For example, a company being analyzed may have a ratio that gives it a relative standing above all others in the industry, but due to a recession, all companies within the industry may be below historical industry operating norms. To be thorough, an analyst must compare the company to both the current average of the industry, as well as the historical industry standard.

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SUMMARY

After reading this chapter, you should be able to:

1. Describe the format and the items of the Statement of Financial Position and explain how the items are classified.
   - One section of the Statement of Financial Position shows what the company owns and what is owing to it. These items are called assets.
   - Assets are classified as current or fixed assets.
   - The other sections of the Statement of Financial Position show:
     1. what the company owes (current and long-term liabilities) and
     2. the shareholders' equity or net worth of the company which represents the shareholders' interest in the company.
2. Describe the structure of the Statement of Comprehensive Income.
   - The Statement of Comprehensive Income presents revenues and expenses over a specific period.
   - Earnings (or profits) are calculated as sales minus all expenses, interests and taxes.
3. Describe the purpose of the Statement of Changes in Equity and describe its link with the Statement of Financial Position and Statement of Comprehensive Income.
   - The Statement of Changes in Equity represents the sum of all retained earnings since the inception of the company.
   - The Statement of Changes in Equity is the link between the Statement of Comprehensive Income and the Statement of Financial Position as it makes the bridge between the earnings that appear in the Statement of Comprehensive Income and the retained earnings that appear in the Statement of Financial Position.
   - Opening balance is the closing balance of the previous year's retained earnings. Profits are added and dividends are deducted to arrive at the closing balance of retained earnings. This closing balance is then transferred to the Statement of Financial Position as retained earnings.
4. Describe the different types of liquidity ratios, risk analysis ratios, operating performance ratios and value ratios, and evaluate company performance using these ratios.
   - Liquidity ratios are used to evaluate a company's ability to turn assets into cash to meet its short-term commitments. Ratios in this category look at the relationship between assets and liabilities, specifically, how well current liabilities are covered by the cash flow generated by the company's operating activities.
   - Risk analysis ratios show how well a company can meet its debt obligations. Because financial risk can increase with higher levels of debt, these ratios help to show whether a company has sufficient earnings to repay the funds it has borrowed and its ability to make regular interest payments on its outstanding debt.
   - Operating performance ratios illustrate how well management is making use of company resources. These ratios focus on measuring the profitability and efficiency of operations. They look specifically at the company's ability to manage its resources by taking into account sales and the costs and expenses incurred in producing earnings.
   - Value ratios show the investor what the company's shares are worth, or the return on owning them, by comparing the market price of the shares to information in the company's financial statements. For example, these ratios look at the earnings available to common shareholders, the dividend yield or return on company shares, and the ultimate valuation of a company through the price-earnings ratio.

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5. Explain how to analyze a company's financial statements using trend analysis and external comparisons.
   - Financial ratios become meaningful when compared with other ratios over a period. A series of similar ratios for the same company can be compared; or the company's ratios can be compared to those of similar companies or industry averages.
   - Ratios are most useful when comparing financial results of companies in the same or similar industries. Trend lines help to put the ratios of each company in historical perspective and identify how each company has fared in relation to others.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 9 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 9 FAQs.

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APPENDIX A: XYZ INC. FINANCIAL STATEMENTS

ASSETS	
Current Assets	
Cash	$20,000
Inventories	60,000
Trade Receivables	40,000
Total Current Assets	120,000
Fixed Assets	
Net Plant and Equipment	400,000
Total Assets	**$520,000**
LIABILITIES	
Current Liabilities	
Trade payables	$20,000
Notes Payable	40,000
Accrued Charges	20,000
Total Current Liabilities	80,000
Long-term Liabilities	
Long-term Debt	200,000
Total Liabilities	$280,000
Shareholders' Equity	
Common Shares (100,000 outstanding shares)	$40,000
Retained Earnings	200,000
Total Shareholder's Equity	240,000
Total Liabilities and Shareholders' Equity	**$520,000**

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XYZ Inc.
Statement of Comprehensive Income
for the Year Ending December 31, 20XX

Sales	$1,000,000
Cost of Sales	(600,000)
Gross profit	400,000
Expenses	
General and Administrative	($200,000)
Selling Expense	(50,000)
Depreciation	(25,000)
Interest Expense	(20,000)
Taxes	(50,000)
Total Expenses	(345,000)
Profit	$55,000
Earnings Per Common Share	**$0.55**

Statement of Changes in Equity
as at December 31, 20XX

Retained Earnings at beginning of period	$175,000
Plus: Profit for the period	55,000
Less: Dividends paid on common shares	(30,000)
Retained Earnings at end of period	**$200,000**

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SECTION 4

UNDERSTANDING MUTUAL FUNDS AND MANAGED PRODUCTS

10 The Modern Mutual Fund

11 Conservative Mutual Fund Products

12 Riskier Mutual Fund Products

13 Alternative Managed Products

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SECTION 4 | UNDERSTANDING MUTUAL FUNDS AND MANAGED PRODUCTS

Section 4 is all about mutual funds and managed products. We begin in Chapter 10 with a discussion of the modern mutual fund. We describe how mutual funds are organized to distribute securities to the public, and the rules you must follow in dealings with clients. The structure of mutual funds is also a focus in this chapter.

Chapters 11 and 12 discuss the different types of mutual funds offered in the marketplace. We begin with low risk mutual fund products in Chapter 11 and move on to riskier mutual funds in Chapter 12. The point that we emphasize throughout is that the risk and return characteristics of a mutual fund depend directly on the composition of its investment portfolio.

Mutual funds are not the only type of managed product available to investors. In Chapter 13, we provide a comprehensive overview of the many types of alternative managed products available in the marketplace. Although mutual fund sales representatives are not licensed to sell these products, it is always good to know what other products are available for investors and to be able to answer client questions about these products.

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The Modern Mutual Fund 10

CONTENT AREAS

What Is a Mutual Fund?

How Are Mutual Funds Organized?

How Are Mutual Funds Regulated?

LEARNING OBJECTIVES

1 | Define a mutual fund, describe the advantages and disadvantages of investing in mutual funds, and differentiate between the two principal types of mutual fund structures.

2 | Describe the organizational features and functions of a mutual fund and compare and contrast the roles played by the directors and trustees, fund manager, portfolio managers, distributors, and custodian.

3 | Describe how mutual funds are regulated and describe the role of the simplified prospectus and the fund facts document.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

annual information form (AIF)

board of directors

Canadian Investor Regulatory Organization (CIRO)

custodian

declaration of trust

fund facts

fund manager

independent review committee

investment fund

mutual fund

National Instrument 81-101

National Instrument 81-102

net asset value per share (NAVPS)

net asset value per unit (NAVPU)

open-end trust

portfolio manager

pre-authorized contribution plan (PAC)

registrar

self-regulatory organization (SRO)

simplified prospectus

System for Electronic Document Analysis and Retrieval + (SEDAR+)

transfer agent

trust deed

trustee

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INTRODUCTION

The Canadian mutual fund industry has experienced tremendous growth over the past decade, both in choice of products available to investors and in the dollar value of assets under management. Accordingly, the industry offers advisors and investors numerous opportunities and challenges. Are mutual funds ideal for all investors? As we have discussed previously in this course, there is no one perfect security that suits all investors; however, mutual funds have become important investment products for many investors.

Although they may seem simple and nearly universally available, mutual funds are in fact a complex investment vehicle. Available in a variety of different forms and through a variety of different distribution channels, they may be one of the most visible vehicles for many investors, from the smallest retail client to the largest institutional investor. The funds themselves are subject to a range of unique provisions and regulations; thus, it is important to ensure a full understanding of this particular investment vehicle.

Do you fully understand what funds can, and cannot, do for a portfolio? Can you provide an educated explanation about the different charges and fees that apply and what the implications are? Can you identify what needs to be done to stay within the regulations? In this first chapter on mutual funds, we explore the structure and regulation of the mutual fund industry.

WHAT IS A MUTUAL FUND?

A **mutual fund** is an investment vehicle operated by an investment company that pools contributions from investors and invests these proceeds into a variety of securities, including stocks, bonds and money market instruments.

Individuals who contribute money become share or unitholders in the fund and share in the income, gains, losses and expenses the fund incurs in proportion to the number of units or shares that they own. Professional money managers manage the assets of the fund by investing the proceeds according to the fund's policies and objectives and based on a particular investing style.

Mutual fund shares/units are redeemable on demand at the fund's current price or **net asset value per share** (NAVPS) or **net asset value per unit** (NAVPU), which depends on the market value of the fund's portfolio of securities at that time.

A fund's prime investment goals are stated in the fund's prospectus and generally cover the degree of safety or risk that is acceptable, whether income or capital gain is the prime objective, and the main types of securities in the fund's investment portfolio.

Individuals who sell mutual funds, whether they are investment advisors or mutual fund sales representatives, must have a good understanding of the type and amount of risk associated with each type of fund. As is true with other financial services, the mutual fund representative must carefully assess each client profile to ensure that the type of mutual fund that is recommended properly reflects the client's risk profile and investment goals. The mutual fund representative also recognizes that a client's investment goals and objectives are never static and that the review process is ongoing, not transactional. Finally, he or she recognizes that proper diversification means that a client's portfolio will contain an asset mix allocated among cash or near-cash investments, equity investments and fixed-income investments.

NOTE TO STUDENTS

We use *mutual fund representative* to refer to those individuals who have met the regulatory requirements to advise on and sell mutual funds. Please be advised that the use of *dealing representative* is also used within the industry. For consistency, this course will use *mutual fund representative*.

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ADVANTAGES OF MUTUAL FUNDS

Mutual funds offer many advantages for those who buy them. Besides offering varying degrees of safety, income and growth, their chief advantages are:

LOW-COST PROFESSIONAL MANAGEMENT

The fund manager, an investment specialist, manages the fund's investment portfolio on a continuing basis. Both small and wealthy investors purchase mutual funds because they do not have the time, knowledge or expertise to monitor their portfolio of securities. This is an inexpensive way for the small investor to access professional management of their investments.

This is perhaps one of the main advantages that mutual funds offer. The fund manager's job is to analyze the financial markets for the purpose of selecting those securities that best match a fund's investment objectives. The fund manager also plays the important role of continuously monitoring fund performance as a way of fine-tuning the fund's asset mix as market conditions change.

DIVERSIFICATION

A typical large fund might have a portfolio consisting of 60 to 100 or more different securities in 15 to 20 industries. For the individual investor, acquiring such a portfolio of stocks is likely not feasible. Because individual accounts are pooled, sponsors of managed products enjoy economies of scale that can be shared with mutual fund share or unit holders. As well as having access to a wider range of securities, managed funds can trade more economically than the individual investor. Thus, fund ownership provides a low-cost way for small investors to acquire a diversified portfolio.

VARIETY OF TYPES OF FUNDS AND TRANSFERABILITY

The availability of a wide range of mutual funds enables investors to meet a wide range of objectives (i.e., from fixed-income funds through to aggressive equity funds). Many fund families also permit investors to transfer between two or more different funds being managed by the same sponsor, usually at little or no added fee. Transfers are also usually permitted between different purchase plans under the same fund.

VARIETY OF PURCHASE AND REDEMPTION PLANS

There are many purchase plans, ranging from one-time, lump-sum purchases to regular purchases in small amounts under periodic accumulation plans (called **pre-authorized contribution plans** or PACs). One of the main advantages of mutual funds is the low cost to invest. With as little as $100, an investor can begin to purchase units in a fund through a PAC. Again, with as little as $100 a month, they can continue to contribute. At redemption, there are also several plans from which to choose.

LIQUIDITY

Mutual fund shareholders have a continuing right to redeem shares for cash at net asset value. National Instrument 81-102 requires that payments be made within two business days after the date of calculation of the net asset value used in establishing the redemption price.

EASE OF ESTATE PLANNING

Shares or units in a mutual fund continue to be professionally managed during the probate period until estate assets are distributed. In contrast, other types of securities may not be readily traded during the probate period even though market conditions may be changing drastically.

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The term 'estate' refers to all the assets owned by an individual at the time of death. Estate planning refers to planning for the administration and disposing of property of one's estate upon death. Probate is the process of validating an individual's will prior to distribution of estate assets.

LOAN COLLATERAL AND MARGIN ELIGIBILITY

Fund shares or units are usually accepted as security for a bank loan. They are also acceptable for margin purposes, thus giving aggressive fund buyers both the benefits *and risks* of leverage in their financial planning.

VARIOUS SPECIAL OPTIONS

Mutual funds consist of not only an underlying portfolio of securities, but also a package of customer services. Most mutual funds offer the opportunity to compound an investment through the reinvestment of dividends.

Sponsors of mutual funds file a variety of reports annually to meet their regulatory disclosure requirements. These reports include the annual information form (AIF), audited annual and interim financial statements and an annual report, among others. The reports must be provided to unitholders or any person on request. They are easily retrieved through **SEDAR+** (the **System for Electronic Document Analysis and Retrieval +**) at www.sedarplus.ca. Increasingly, these reports contain useful educational features such as manager commentaries.

Other benefits associated with managed products include record-keeping features that save clients and their advisors time in complying with income tax reporting and other accounting requirements.

DISADVANTAGES OF MUTUAL FUNDS COSTS

For most people, a weakness in investing in a mutual fund is the perceived steepness of their sales and management costs. Historically, most mutual funds charged a front-end load or sales commission and a management fee that was typically higher than the cost to purchase individual stocks or bonds from a broker. Competition in the market has subsequently reduced both load and management fees, and investors are now offered a wider choice of investment options.

UNSUITABLE AS A SHORT-TERM INVESTMENT OR EMERGENCY RESERVE

Most funds emphasize long-term investment and thus are unsuitable for investors seeking short-term performance. Since sales charges are often deducted from a plan holder's contributions, purchasing funds on a short-term basis is unattractive. The investor would have to recoup at least the sales charges on each trading transaction. This disadvantage does not apply to money market funds, which are designed with liquidity in mind.

With the exception of money market funds, fund holdings are generally not recommended as an emergency cash reserve, particularly during declining or cyclically low markets when a loss of capital could result from emergency redemption or sale.

PROFESSIONAL INVESTMENT MANAGEMENT IS NOT INFALLIBLE

Like equities, mutual fund shares or units can suffer in falling markets where unit values are subject to market swings (systematic risk). Volatility in the market is extremely difficult to predict or time, and is not controllable by the fund manager.

TAX COMPLICATIONS

Buying and selling by the fund manager creates a series of taxable events that may not suit an individual unitholder's investment time horizon. For example, although the manager might consider it in the best interests of the fund to take a profit on a security holding, an individual unit holder might have been better off if the manager had held on to the position and deferred the capital gains liability.

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THE STRUCTURE OF MUTUAL FUNDS

An **investment fund** is an incorporated company or trust that is established for the purpose of managing the fund's investments for persons who invest in the company or trust. By selling shares or units to investors, the fund gathers money and it is invested in accordance to the fund's investment policies and objectives by the fund's portfolio manager(s). The fund earns income principally from dividends and interest it receives on the securities it holds and from the capital gains it may make by selling securities held in its portfolio. An investment fund can also have capital losses.

A mutual fund may be structured as either a trust or a corporation.

MUTUAL FUND TRUSTS

The most common structure for mutual funds in Canada is the **open-end trust**. The trust structure allows a fund itself to avoid taxation. Any interest, dividends and capital gains income, net of the fund's fees, expenses and capital losses, if passed to its unitholders each calendar year, will allow the trust to avoid being taxed on its income. As a matter of course all mutual fund trusts take advantage of this ability to avoid income taxes. Any income that has flowed through to the unitholder is taxed in the hands of the unitholder. The rate of income tax depends on the type of income that the fund generated (i.e., interest, dividends, capital gains) and the type of account (e.g., RRSP) the client holds the mutual fund in.

The **declaration of trust**, **trust deed** (or similar document) establishing the mutual fund trust sets out:

- the fund's principal investment objectives
- its investment policy
- any restrictions on the fund's investments
- who the fund's trustee, manager and custodian will be (or simply names the trustee and gives the trustee the power to appoint a manager and a custodian)
- how many classes or series of units the fund will or may have. Different classes and series having different characteristics are established to make them more attractive to different types of purchasers (i.e., general public, pension funds, institutional investors)

Rights and privileges attached to mutual fund units are specified in the trust deed. Always included is the holder's right to redeem the units at a price that is the same as, or very close to, the fund's net asset value per unit (NAVPU) next determined after the fund receives a redemption request in proper form. A fund's unitholders typically are not given voting rights under the terms of the trust deed. Voting rights, if any, set out in the trust deed and those set out in NI 81-102 are described in the fund's simplified prospectus.

NI 81-102 generally requires the trustee or manager of a mutual fund trust (or an incorporated mutual fund) to convene a meeting of unitholders to consider and approve certain specific matters. These matters include a change in the fund's fundamental investment objectives, a change in the mutual fund manager, a proposed new fee or expense or a proposed increase in a fee or expense to be charged to the fund or unitholders or a decrease in the frequency of calculating net asset value.

MUTUAL FUND CORPORATIONS

Mutual funds may also be set up as federal or provincial corporations. Provided they meet certain conditions set out in the *Income Tax Act*, mutual fund corporations are eligible for a special tax treatment if the corporation's holdings consist mainly of a diversified portfolio of securities. The income that the mutual fund corporation earns must be derived primarily from interest and dividends received from these securities and any capital gains realized from the sale of these securities. Investors in mutual fund corporations receive shares in the fund instead of the units that are received by investors in mutual fund trusts. Mutual funds corporations lack the flow through status of mutual fund trusts. However, mutual fund corporations can achieve a similar result by declaring dividends during the course of the year that are equivalent to the corporation's net income after fees and expenses. These dividends are then taxed in the hands of the fund's shareholders.

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MUTUAL FUNDS FUNDAMENTALS

Can you identify the differences between a mutual fund trust and a mutual fund corporation?
Complete the online learning activity to assess your knowledge.

HOW ARE MUTUAL FUNDS ORGANIZED?

While there are significant structural differences between mutual fund corporations and mutual fund trusts, they both share common organizational features. Governance is the responsibility of the board of directors or the trustee, day-to-day management is the responsibility of the fund manager, who can perform a number of key functions on behalf of a fund itself, but most often hires others to attend to many of these functions, including portfolio management, distribution of units/shares, registration and transfer agency services, accounting and trade processing. Each mutual fund is required to have an Independent Review Committee (IRC). A single IRC can act for a number of separate funds.

DIRECTORS AND TRUSTEES

The **board of directors** of a mutual fund corporation, and the **trustee(s)** of a mutual fund trust, have the ultimate responsibility for the fund's activities, including ensuring that the fund's investments are in keeping with the fund's investment objectives. To assist in this task, the board of directors or trustee(s) may rely on others to provide certain services to the fund, including a fund manager, a portfolio manager(s), a principal distributor, a custodian, and a registrar and transfer agent for the fund's units/shares. While the fund issues and redeems its own securities, it may enter into contracts (with fund managers, distributors and custodians) that spell out the services each will provide and the fees and other charges to which each is entitled. Typically a fund manager is given overall responsibility and it may hire others to provide portfolio management, back office administration, distribution, custody, and registrar and transfer agency services. A fund manager may not act as a fund's custodian.

THE FUND MANAGER

The **fund manager** provides day-to-day supervision of the fund's investment portfolio. While a fund manager may provide portfolio management to a fund it manages, most often it hires a company that specializes in providing such services, often an affiliated company. In trading the fund's securities, the fund manager must, or ensure that the portfolio manager of the fund, observe a number of guidelines, prohibitions and restrictions as specified in the fund's trust deed (or incorporation documents) and simplified prospectus, as well as constraints imposed by applicable laws, most importantly National Instrument 81-102. Often a fund manager will hire one or more **portfolio managers** to manage the fund's investment portfolio under the fund manager's supervision. The fund manager is responsible for the portfolio manager's actions. Fund managers and portfolio managers generally maintain a portion of fund assets in cash and short-term liquid debt instruments to be able to pay unitholders or shareholders who redeem their units or shares respectively, pay distributions (or dividends in the case of mutual fund corporations)[1] and purchase securities for the fund's portfolio as opportunities arise. A fund manager's ability to properly judge the amount of cash needed, and still have fund assets as fully and productively invested as possible, has a direct bearing on the success of the fund.

Other responsibilities of a fund manager, which it can attend to itself or outsource, include calculation of the fund's net asset value, preparation of the fund's fund facts document, simplified prospectus, annual information form and other required reports, income tax reporting, shareholder or unitholder record-keeping and reporting, and providing instructions to the custodian[2] for the release of the fund's cash or securities to settle the fund's purchases and sales

[1] Unitholders and shareholders generally re-invest distributions and dividends in the funds.

[2] The portfolio manager typically is granted this authority by the fund manager.

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of securities. The fund manager can retain third parties to provide these services, but is ultimately responsible for the actions of such third parties. The fund manager receives a management fee for managing the fund which it uses to pay for services that others provide to the fund. This fee typically is calculated and accrues daily and is paid monthly in arrears. It is calculated as a percentage of the net asset value of the fund being managed.

Starting in late 2010, mutual fund managers were required to be registered with provincial and territorial securities administrators, and must meet a number of requirements, including capital and insurance requirements.

INDEPENDENT REVIEW COMMITTEE

Each mutual fund is required under National Instrument 81-107 to have an **independent review committee** (or IRC) which is required to either approve or consider conflicts of interest that are identified by the manager of the fund. With regard to certain matters, such as inter-fund trading or the purchase of securities underwritten by an affiliate of the manager, the independent review committee's approval must be obtained prior to such activities taking place. Where a conflict of interest arises, the IRC will only approve actions if certain requirements are met, including and most importantly the action achieves a fair and reasonable result for the fund. With regard to other conflicts of interest that are identified by the manager, the approval of the IRC is not required, but the IRC issues a report each year to unitholders where it is obliged to describe each instance where its recommendation with regard to a conflict of interest has not been followed by the manager of the fund.

MUTUAL FUND DISTRIBUTION

Mutual funds are distributed through a number of channels by dealing representatives employed by investment dealers, mutual fund dealers and, to a lesser extent, exempt market dealers. Mutual funds can be distributed through sales forces employed by organizations that control both management and distribution of mutual funds (e.g., IGM Financial Inc., which includes Investors Group, Mackenzie Investments and Investment Planning Counsel) and by dealing representatives employed by dealers who are affiliated with financial institutions. Employees of trust companies, banks or credit unions who are employed both by the financial institution to provide banking and related services, can also be registered as dealing representatives for an affiliated, but separate, mutual fund dealer.

When selling or providing advice or information about mutual funds, these employees are acting solely on behalf of the affiliated mutual fund dealer. They are required to comply with all the laws and regulations that apply to dealing representatives. For example, they must explain the objectives and relevant features of various funds using language that clients can understand, including unsophisticated clients, They handle client inquiries about a fund's features, and receive and transmit orders for fund unit/share redemptions and purchases. As dealing representatives these employees must meet the "Know Your Client" rule and suitability standards in providing such services.

THE CUSTODIAN

When a mutual fund is established, a separate organization, most often a trust company, is appointed as the fund's **custodian**. The custodian receives and holds the fund's money obtained from all sources—investors buying the fund's units or shares, income earned by the fund's investment portfolio, proceeds from the sale of the fund's investments, holds all the fund's assets and distributes the fund's money to pay the fund's expenses, including management fees, purchases of securities for the fund's investment portfolio, payments for redeemed units and shares and distributions or dividends to unitholders or shareholders respectively.

Sometimes the custodian also serves as the fund's **registrar** and **transfer agent**, maintaining records of who owns the fund's units/shares. This duty is complicated by the fact that the number of outstanding units/shares is continually changing through purchases and redemptions. Fractional share purchases and the reinvestment of distributions/dividends further complicate the custodian's task.

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To better keep track of account activity, almost all mutual funds use a book-based system for settling account transactions. With this system, purchases and redemptions of fund units and shares are recorded in a client's account maintained by the registrar and transfer agent. There are no paper certificates representing the shares or units. Instead of issuing certificates, the fund manager or the dealer periodically issues statements that set out the client's holdings in each fund at the end of the applicable period that reconcile to the registrar and transfer agent's records.

HOW ARE MUTUAL FUNDS REGULATED?

The Canadian securities industry is a regulated industry. Each province and territory has its own securities act and its own regulator who is responsible for regulating the underwriting and distribution of securities designed to protect investors and the industry. Securities regulations related to mutual funds are based upon three broad principles: personal trust, disclosure and regulation.

The success of these principles in promoting positive market activities relies largely on ethical conduct by industry registrants. The code of ethics establishes norms for duty and care that incorporate not only compliance with the "letter of the law," but also respect for the "spirit of the law." These norms are based upon ethical principles of trust, integrity, justice, fairness and honesty.

The code distills industry rules and regulations into five primary values:

- Mutual fund representatives must use proper care and exercise professional judgement.
- Mutual fund representatives should conduct themselves with trustworthiness and integrity, and act in an honest and fair manner in all dealings with the public, clients, employers and employees.
- Mutual fund representatives should conduct, and should encourage others to conduct, business in a professional manner that will reflect positively on the individual registrant, the firm and the profession, and should strive to maintain and improve their professional knowledge and that of others in the profession.
- Mutual fund representatives must act in accordance with the securities act of the province or provinces in which registration is held, and must observe the requirements of the Self-Regulatory Organization (SRO) of which the firm is a member.
- Mutual fund representatives must hold client information in the strictest confidence.

SELF-REGULATORY ORGANIZATION (SRO)

Investment firms that are members of the **self-regulatory organization** (SRO), and the registered employees of such dealer members, are subject to the rules and regulation of the SRO. Furthermore, all securities industry participants are subject to the securities law in their particular provinces and in any other province where the relevant securities administrators may claim jurisdiction.

Please note that reference to *province* or *provincial* encompasses Canada's 10 provinces and three territories.

The **Canadian Investment Regulatory Organization** (CIRO) is the mutual fund industry's SRO for the distribution side of the mutual fund industry. It does not regulate the funds themselves. That responsibility remains with the provincial securities commissions, but CIRO does regulate how the funds are sold.

In Québec, the mutual fund industry is under the responsibility of the Autorité des marchés financiers and the Chambre de la sécurité financière. The Autorité is responsible for overseeing the operation of fund companies within the province, while the Chambre is responsible for setting and monitoring continuing education requirements and for enforcing a code of ethics. A co-operative agreement currently in place between the MFDA and the Québec regulatory organizations will help to avoid regulatory duplication and to ensure that investor protection is maintained.

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In October 2023, the government of Quebec and the Autorité des marchés financiers (AMF) announced that they have approved a delegation of powers to the Canadian Investment Regulatory Organization (CIRO). CIRO will have the power to act as the organization that registers dealing representatives of a mutual fund dealer. They were also delegated the power to conduct compliance examinations for mutual fund dealers who operate in Quebec. This delegation of powers represents a further step in the harmonization of the regulatory framework across Canada.

Note that at the time of this writing, CIRO and the AMF were working together to form an implementation timeline for the delegation of powers. During this period of planning and transition, CIRO's regulatory requirements for the most part will not apply to the dealer's activities in the province of Quebec.

NATIONAL INSTRUMENTS 81-101 AND 81-102

Canadian funds fall under the jurisdiction of the securities act of each province. Securities administrators control the activities of these funds, and their managers and distributors, by means of a number of National and Provincial Policy Statements dealing specifically with mutual funds, and by provincial securities legislation applicable to all issuers and participants in securities markets. **National Instrument 81-101** (NI 81-101) deals with mutual fund prospectus disclosure. **National Instrument 81-102** (NI 81-102) and a companion policy contain requirements and guidelines for the distribution and advertising of mutual funds.

GENERAL MUTUAL FUND DISCLOSURE REQUIREMENTS

Most mutual funds are qualified for sale in all provinces and are therefore registered for sale in each jurisdiction. With certain exceptions, the funds must annually file client disclosure documents (i.e., Fund Facts, simplified prospectus and Annual Information Form) all of which must be acceptable to the provincial securities administrator. Most funds, particularly the smaller ones, file their respective client disclosure documents in provinces where sales prospects appear favourable. Selling a fund's securities to residents of provinces in which the fund has not been qualified is prohibited. It is important, therefore, that mutual fund representatives deal only in those funds registered in their own jurisdiction.

Mutual funds predominantly use the client disclosure documents system to qualify the distribution of mutual fund securities to the public. The actual requirements of this system are set out in NI 81-101.

The documents included as part of the disclosure requirements consist of:

- Fund Facts
- Simplified Prospectus
- The Annual Information Form (AIF)
- The annual audited statements or interim unaudited financial statements
- Other information required by the province or territory where the fund is distributed, such as material change reports and information circulars.

NI 81-101 requires only the delivery of the fund facts document to an investor in connection with the purchase of a mutual fund, unless the investor also requests delivery of the simplified prospectus, the annual information form and/or the financial statements.

THE FUND FACTS DOCUMENT

The **Fund Facts** document is designed to give investors key information about a mutual fund. It must be written in plain language and must consist of no more than two double-sided pages. It must be presented in an easily understood format that follows a universal standard so that investors can compare mutual fund data consistently. The purpose of the Fund Facts document is to provide timely information that may affect the investors' decision.

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Pre-purchase delivery of the Fund Facts document to investors is mandatory for each class or series of mutual funds. It may be delivered in person, by email, or through other means, according to how the dealer typically interacts with its investors.

The following disclosure of investor rights related to withdrawal and misrepresentation must appear in the Fund Facts document:

- Investors have the right to withdraw from the purchase within 48 hours after confirmation of the purchase is received.
- Depending on the province, they maintain their right of damages or to rescind the purchase if the Fund Facts document, simplified prospectus, AIF, or financial statements contain a misrepresentation.
- Each province specifies a time limit within which investors must act to claim the right to damages or rescission.
- Investors can request a copy of the simplified prospectus at no charge.

DISCLOSURE COMPONENTS OF FUND FACTS

The fund facts document is divided into two major headings, each with its own section of related items.

The sections covered under the first heading provide information about the fund:

Table 10.1 | Information About the Fund

Fund Facts Section	Purpose
Introduction	Provides the document date, name of the fund, the fund manager and if the mutual fund has more than one class or series of securities, the name of the class or series.
Quick Facts	Provides key background points including the date the fund was created, the total value of all units of the fund, the Management Expense Ratio (MER), the identity of the portfolio manager, the expected frequency and date of distributions, the minimum investment needed for both the initial and repeat purchases.
Investment of the Fund	Provides the fundamental nature of the mutual fund under the heading "What Does the Fund Invest In?" as well as a list of top 10 investments and the percentage of net asset value for each investment, the investment mix, a breakdown of the fund's investment exposure.
Risks	Provides a reminder that the fund is subject to a certain degree of risk, the extent of that risk demonstrated by the risk rating assigned to the fund (there are 5 risk ratings: Low, Low to Medium, Medium, Medium to High and High). Investors are also reminded that the fund does not guarantee a return and the investor may not get back the amount of money invested.

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Table 10.1 | Information About The Fund

Past Performance	Appears under the heading "How Has the Fund Performed?" and provides three illustrative tools: I. The Fund's performance over the past 10 years (or since the date of its inception if under 10 years), illustrated by a chart, on a year-by-year basis. Returns are "after expenses" have been deducted. II. A table showing both the best and worst returns for the Fund in a 3-month period over the past 10 years (or since the date of its inception if under 10 years). III. An average return calculation based on an investment of $1,000 into the Fund 10 years ago (or since the date of its inception if under 10 years) and its worth today, together with the percentage annual compound return during this period.
Suitability	Falls under the heading of "Who is this Fund for?" and provides a description of the investor characteristics for whom the Fund may or may not be appropriate and the portfolios for which the Fund is and is not suited.
Impact of Income Taxes on Investor Returns	The tax consequences of the Fund are highlighted in this area under the heading of "A word about taxes."

The sections of the fund facts document covered under the second heading provide information about costs, rights and other information:

Table 10.2 | Cost, Rights and Other Information

Fund Facts Section	Purpose
Cost of Buying, Owning and Selling the Fund	This area is divided into three subsections: I. Sales Charges – disclosure of fees that may be charged to the investor in a variety of ways depending on the type; front load, low load, deferred sales charges or no load. II. Fund Expenses – although an investor does not pay for these expenses directly, they may reduce the Fund's returns. Such expenses may include Management Expense Ratio (MER) and the Trading Expense Ratio (TER). The TER represents the amount of trading commissions incurred to manage the portfolio compared to the total assets of the fund. Both ratios are expressed as a percentage value and translated to a dollar figure relative to every $1,000 invested. Trailing commissions are also highlighted in this area. III. Other Fees – these may include short-term trading fees, switch fees and/or change fees.
Statement of Rights	This area would fall under the heading of "What if I change my mind?" It advises the investor that they may have certain rights and options within a defined time period available to them. These rights include cancelling a purchase within 48 hours after receiving confirmation of the purchase.
More Information about the Fund	If the investor wishes to obtain more information, such as the simplified prospectus and other disclosure documents, the appropriate contact information would be provided in this area.

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FUND FACTS DOCUMENT

Follow the steps to load a Fund Facts document and familiarize yourself with each section. *Complete the online learning activity to assess your knowledge*.

THE SIMPLIFIED PROSPECTUS

Despite the introduction of the fund facts document, the simplified prospectus of a mutual fund is still required to be filed and made available to an investor upon their request.

A mutual fund prospectus is normally shorter and simpler than a typical prospectus for a new issue of common shares. Under the simplified prospectus system, the issuer must abide by the same laws and deadlines that apply under the full prospectus system. As well, the buyer is entitled to the same rights and privileges.

The **simplified prospectus** must be filed with the securities commission annually, but need not be updated annually unless there is a change in the affairs of the mutual fund. The simplified prospectus is written in plain language and set up in a specific format so that it is easier for the investor to find the information.

The mailing or delivery of the simplified prospectus must be made to the purchaser upon their request. For further purchases of the same fund, it is not necessary to provide the simplified prospectus (or fund facts document) again unless it has been amended or renewed.

The simplified prospectus consists of two sections:

- Part A provides introductory information about the mutual fund, general information about mutual funds and information applicable to the mutual funds managed by the mutual fund organization.
- Part B contains specific information about the mutual fund.

The simplified prospectus may be used to qualify more than one mutual fund, as long as Part A of each prospectus is substantially similar and the funds belong to the same mutual fund family, administered by the same entities and operated in the same manner.

The simplified prospectus must contain the following information:

- Introductory statement describing the purpose of the prospectus and identifying the other information documents which the fund must make available to investors
- Name and formation of the issuer, including a description of the issuer's business
- Risk factors and description of the securities being offered
- Method used to set the price of the securities being sold or redeemed, and disclosure of any sales charges
- Method of distribution
- Statement of who has the responsibility for management, distribution and portfolio management
- Fees paid to dealers
- Statement of management fees and other expenses, including the annual management expense ratio for the past five years
- The fund's investment objectives and practices
- Information on the amount of dividends or other distributions paid by the issuer
- In general terms, the income tax consequences to individuals holding an investment in the fund
- Notice of any legal proceedings material to the issuer
- Identity of the auditors, transfer agent and registrar

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- Statement of the purchaser's statutory rights
- Summary of the fees, charges and expenses payable by the security holder

The prospectus must be amended concurrently with the fund facts document when material changes occur, and investors must receive a copy of the amendment.

Certain types of mutual funds may not use the simplified prospectus system under National Instrument 81-101. Mutual funds that invest in real property, for example, cannot use the simplified prospectus system.

As part of the simplified prospectus system, a fund must provide its investors with financial statements on request. Annual audited financial statements must be made available to the securities commission(s) where the fund is registered on or before the deadline set by the commission(s). These statements must be made available to new investors.

Unaudited financial statements as at the end of six months after the fund year-end must also be submitted to the securities commissions, usually within sixty days after the reporting date. These statements must also be given to new investors.

THE ANNUAL INFORMATION FORM

Delivery of the **annual information form** (AIF) is available to investors on request. Much of the disclosure required in the AIF is similar to that provided in the simplified prospectus. The AIF contains, in addition to the above, information concerning:

- Significant holdings in other issuers
- The tax status of the issuer
- Directors, officers and trustees of the fund and their indebtedness and remuneration
- Associated persons, the principal holders of securities, the interest of management and others in material transactions
- The particulars of any material contracts entered into by the issuer

Case Study | Never Put All Your Eggs in One Basket: Daniella Diversifies (*for information purposes only*)

Daniella has been investing since her early teens, using savings from her part-time job to buy T-bills. After graduating from university and getting her first full-time job, Daniella began to save larger amounts of her income, and began buying Government of Canada bonds through her online brokerage account. Daniella's bond portfolio returns were satisfactory, generating steady if low returns as interest rates continued at their near-historic lows.

Recently, Daniella has learned more about investing and has read that over the long term, equity investments tend to outperform bond investments. Furthermore, the tax rate on dividend and capital gains generated by equities is much lower than that of interest income. She decides she wants to invest some of her savings into equities, but wants to start small and build her comfort level and knowledge over time.

She meets with Rebecca, her bank's mutual fund representative, to discuss her options and to get some advice. Daniella explains her situation and her wish to invest in equities to earn better returns over time. Rebecca confirms for Daniella that historically equities have outperformed bonds over the long term. She also explains to Daniella that investing in equities will help diversify her portfolio, enhancing returns while reducing the risk of overconcentration in one asset class. Equities can also provide diverse exposure to blue-chip companies like banks that produce bond-like returns through their dividend payments, while also gaining exposure to companies that are more growth-orientated, like in the technology sector.

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Case Study | Never Put All Your Eggs in One Basket: Daniella Diversifies (*for information purposes only*)

Rebecca then explains the importance of achieving diversification in regards to the stocks of various companies across a range of sectors and industries, again to avoid over-concentration risk. She explains that by doing so, Daniella will, as the old saying goes, avoid putting all of her eggs in one basket. So, in the event that one company's stock underperforms or its value falls dramatically, Daniella will have a variety of other holdings to offset that bad performance.

However, to achieve an appropriate level of diversification requires the purchase of at least 25 to 30 stocks. Given the cost and the investment amount required, it is unrealistic at this stage for Daniella to do this. Nor would she have the time and knowledge to manage all of those holdings. So, Rebecca recommends to Daniella that she can achieve instant diversification through a risk-appropriate mutual fund. A mutual fund will provide Daniella with the flexibility she needs to invest a smaller amount and to increase her equity exposure over time in a cost-effective manner. While she continues to build her knowledge about equities, she can immediately benefit from the knowledge and capabilities of the fund's portfolio managers while achieving the benefits of diversification instantly.

Rebecca shows Daniella the fund facts document of a fund that she feels would be appropriate in meeting Daniella's needs, pointing out how the mandate of the fund is clearly defined, the fund's top holdings are listed and that all costs and fees are easily understood and transparent for investors. Daniella agrees with Rebecca's recommended course of action and they then begin the process of establishing Daniella's investment plan.

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SUMMARY

After reading this chapter, you should be able to:

1. Define a mutual fund, describe the advantages and disadvantages of investing in mutual funds, and differentiate between the two principal types of mutual fund structures.
   - A mutual fund is an investment vehicle operated by a fund manager that pools contributions from investors and invests them in a variety of securities, which may include stocks, bonds and money market instruments, depending on the investment policies and objectives of the mutual fund.
   - A modern mutual fund can be established as either a trust or a corporation. Mutual fund trusts issue units, while mutual fund corporations issue shares.
   - The trust structure enables the fund itself to avoid taxation. Any interest, dividends or capital gains income, net of the fund's fees and expenses can be passed on directly to the unitholders without the trust being subject to any income taxes.
   - A mutual fund corporation's holdings must consist mainly of a diversified portfolio of securities. The income that a mutual fund corporation earns must be derived primarily from the interest and dividends received on the securities it owns and net capital gains realized from the sale of these securities.
2. Describe the organizational features and functions of a mutual fund and compare and contrast the roles played by the directors and trustees, fund manager, distributors, and custodian.
   - The board of directors of a mutual fund corporation, and the trustees of a mutual fund trust, have ultimate responsibility for the fund's activities, including ensuring that the investments are in keeping with the fund's investment objectives.
   - The fund manager provides day-to-day supervision of the fund's investment portfolio.
   - The fund manager typically hires a portfolio manager or managers to manage the fund's investment portfolio, a custodian to hold the fund's assets, and a registrar and transfer agent to keep track of units or shares outstanding and who owns the units or shares. The fund manager is responsible for the distribution of units and can use a variety of distribution channels consisting of mutual fund dealers and investment dealers, both those affiliated and unaffiliated with the fund manager.
   - Mutual funds are distributed in many ways, including dealing representatives who are employees or agents of investment dealers and mutual fund dealers.
   - The custodian receives and holds the fund's money obtained from all sources—investors buying the fund's units or shares, income earned by the fund's investment portfolio, proceeds from the sale of the fund's investments and distributes the fund's money to pay the fund's expenses.
3. Describe how mutual funds are regulated and describe the role of the simplified prospectus and the fund facts document.
   - Mutual funds are subject to provincial and territorial laws and regulations.
   - NI 81-102 addresses key aspects of the creation, operation and distribution of mutual fund securities.
   - National Instrument 81-101 sets out the requirements as to the form and content of a mutual fund's disclosure documents, including the fund facts document, which is the single most important document for investors.
   - The fund facts document states the fundamental investment objectives of the fund, the risk factors, and the fees and charges that investors will have to pay directly and fees and expenses paid by the fund.
   - The form and content of the fund facts document must comply with the requirements of National Instrument 81-101; the fund facts document must be given to the investor.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 10 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 10 FAQs.

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Conservative Mutual Fund Products

11

CONTENT AREAS

What Are Money Market Mutual Funds?

What Are Mortgage Mutual Funds?

What Are Bond and Other Fixed-Income Funds?

LEARNING OBJECTIVES

1 | Compare and contrast the investment objectives and features of money market funds, mortgage funds, bond funds and other fixed-income funds.

2 | Differentiate the two methods of calculating yield of money market funds.

3 | List and describe the investment objectives, comparative returns and the volatility of the different types of fixed-income mutual funds.

4 | Describe the impact of interest rate risk on fixed-income securities and the concept of duration as it applies to conservative mutual funds.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

amortization period

amortized cost

basis points

bond funds

capital gains

closed mortgage

conventional mortgage

corporate bonds

current yield

default risk

duration

effective yield

fixed-income funds

interest rate risk

market review

money market fund

mortgage

mortgage funds

non-conventional mortgage

open mortgage

preferred dividend funds

seven-day yield

short-term bond funds

term

term to maturity

time-weighted maturity

volatility

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INTRODUCTION

At this point in your studies, you will begin to learn about the products mutual fund sales representatives are licensed to sell. This is the "know your product" side of providing excellent client service. When assisting clients with their investment decisions, product knowledge is every bit as important as knowing the client. Lack of a thorough understanding of both the client and product areas risks an improper fit between clients and mutual funds. The next two chapters examine the various types of mutual funds available in the marketplace. This examination begins with conservative mutual fund products, consisting of money market mutual funds, mortgage mutual funds, bond funds and other fixed-income mutual funds. These are products sitting at the lower end of the risk hierarchy.

The following sections examine the investment objectives of the specific class of fund and compare the performance of the fund class to other fund classes and benchmarks. For example, how does the return on money market funds compared to the fund next highest in risk? As well, how do money market funds compared to the returns on T-bills?

The chapter then goes on to explain what to look for in the mutual fund tables. Finally, the chapter presents a sample mutual fund, citing its investment objectives and examining the composition of its portfolio as contained in its annual report.

WHAT ARE MONEY MARKET MUTUAL FUNDS?

According to the Canadian Investment Funds Standards Committee (CIFSC), **money market funds** must invest at least 95% of their total net assets in money market securities. Money market securities are short term, highly liquid fixed income investments of varying maturities of 364 days or less that are readily convertible into cash.

Their returns reflect changes in short-term interest rates, moving up as interest rates rise, and down as they fall. There are, however, two important differences that distinguish money market fund investments from their traditional banking counterparts.

- Money market investments are not insured by the Canada Deposit Insurance Corporation (CDIC) or any other insurer.
- Money market funds may fluctuate in value with changes in short-term interest rates.

The risk of default on these portfolios is very low, since they are backed by the governments issuing them. This does not mean that their value cannot change, however. Recall that the value of any fixed-income security, like a bond, will fluctuate as market interest rates change. The change in value will be inversely related to the direction of interest rates and directly related in larger magnitudes as maturities increase in length. The value of money market securities should still fluctuate with changing interest rates, but the fluctuation should be relatively small, because their maturity is very short.

MONEY MARKET FUNDS: INVESTMENT OBJECTIVES

The investment objective of a money market fund is to earn stable returns by investing in short-term money market securities. These securities include Government of Canada T-bills, T-bills of other provinces, very short-term government securities other than T-bills, and high-quality corporate securities such as commercial paper. As required by National Instrument 81-102, the term to maturity of these securities is less than one year, and the average term to maturity of a money market fund must be 90 days or less.

The value of short-term debt securities is not very sensitive to changes in interest rates. A risk associated with long term investing in money market funds is that these funds sometimes have a return that does not keep pace with inflation, thus eroding the purchasing power of the investment. However, money market securities, and money market funds, are expected to have a low amount of volatility (risk). In addition, money market securities generally have a low amount of default risk. Certainly, the securities issued or guaranteed by the government have virtually

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no default risk. Corporate money market securities have some default risk, but mutual funds will invest only in those that have high credit ratings.

Safety of principal and liquidity are of prime importance for money market funds. Given the low risk characteristics and the built-in liquidity of money market securities, this objective is relatively easy to achieve. The objectives of safety of principal and high liquidity are similar to the investment objectives of traditional banking and trust company products, such as term deposits and guaranteed investment certificates (GICs). There is, however, an important difference between money market funds and traditional deposits. Money market funds are *not* covered by deposit insurance. Clients must be informed of this fact prior to the purchase of any mutual fund, and this is especially important because of the similarity between money market funds and deposits.

THE RETURNS ON MONEY MARKET FUNDS

Given the low-risk profile and objectives of capital preservation and liquidity of money market funds, you would expect that their return performance would show considerable stability. This performance profile is confirmed in the graph in Figure 11.1. This graph compares the annual returns of a money market fund to the annual returns of mortgage funds during a hypothetical period of 15 years.

Figure 11.1 | Simple Annual Return Funds

Source: Bloomberg

Notice that the return pattern on mortgage mutual funds is both higher and more volatile than money market funds. Using the same data that were used to construct Figure 11.1, this means that the compound average annual return over the example of a 15-year period on mortgage funds (4.42%) is higher than the compound average annual return in the same period for money market funds (3.21%). The trade-off of creating the higher return on the average mortgage fund, therefore, is more volatility from year to year.

If you compare what you earn on the average money market fund to what you might earn on an average T-bill, you will find that the average money market fund return is lower. Perhaps the simplest reason for the difference is the management fees charged on money market fund. Although management fees are lower for this type of mutual fund, they still reduce the net return earned by your clients. If you assume an annual management fee of 1%, then the total return earned by the average money market mutual fund was equivalent to that earned on T-bills over the 15-year period.

All returns earned on money market funds are considered interest earnings and are taxed as interest income. Since money market funds invest only in money market securities that pay income, no other type of income can be earned. In general, money market funds distribute the earned interest income on a monthly basis.

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READING PERFORMANCE TABLES: MONEY MARKET FUNDS

Until the advent of the Internet, mutual fund data in the financial press was constrained by the newspaper columns in which they were printed. As the Internet grew and mutual fund data became more widely disseminated, the amount and detail of data also expanded. Mutual fund data are now readily available in great depth on the websites of newspapers (e.g., www.globeandmail.com), web search and links sites (e.g., www.fundlibrary.com) and third-party providers such as *Morningstar* (www.morningstar.ca).

A mutual fund investor turning to any of these sources typically finds a basic array of information on funds of interest, which could include:

- performance data, usually from one month to inception
- comparison to the returns of an appropriate index over the same time periods
- sector or asset allocation breakdown
- top 10 holdings and portfolio weights
- a record of distributions
- a profile of the fund manager
- price history and charts
- background information, including management fees, sales fees, RRSP eligibility and minimum investment amounts

Performance data for money market funds are reported slightly differently compared to other types of mutual funds. While other funds report changes in net asset value per unit, most money market funds assume that the net asset value per unit is usually constant at $10 and instead report the yield currently being earned.

When money market funds report performance, they use two yield calculations: the **current yield** and the **effective yield**. The current yield for a money market fund is calculated as the most recent seven-day yield on the fund, adjusted to an annual rate. The **seven-day yield** is calculated as follows:

$$\text{Seven-day yield} = \frac{\text{Ending Net Asset Value}}{\text{Initial Net Asset Value}} - 1$$

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EXAMPLE

Consider a fund with $10 million of net assets that have earned the following amounts over the last seven days.

Day	Earnings (*net of expenses*)	Cumulative NAV
1	$1,500	$10,001,500
2	$1,600	$10,003,100
3	$1,750	$10,004,850
4	$1,400	$10,006,250
5	$1,499	$10,007,749
6	$1,340	$10,009,089
7	$1,400	$10,010,489

The seven-day yield is calculated by dividing the ending net asset value ($10,010,489) by the fund's initial net asset value ($10 million) and then subtracting 1. The current yield is the seven-day yield multiplied by 365/7.

$$\text{Current yield} = \left(\text{Seven-day yield} \times \frac{365}{7}\right)$$

$$= \left(\frac{10{,}010{,}489}{10{,}000{,}000} - 1\right) \times \left(\frac{365}{7}\right) \times 100 = (0.0010489) \times \left(\frac{365}{7}\right) = 0.0547 \text{ or } 5.47\%$$

The effective yield is computed using the seven-day yield (0.0010489 in the example) and the following effective yield formula.

$$\text{Effective yield} = \left[(1 + \text{Seven-day yield})^{365/7} - 1\right]$$

Substituting the 0.0010489 for the seven-day yield in this formula gives an effective yield of 5.62%.

$$\text{Effective yield} = \left[(1 + 0.0010489)^{365/7} - 1\right] = 0.0562 \text{ or } 5.62\%$$

Note: to calculate 1.0010489 to the power of 365/7, you would need to use the "Y to the X" exponent button on your calculator. The Y variable on your calculator would be 1.0010489 and the X variable would be 52.1429 (since 365/7 = 52.1429). 1.0010489 to the power of 52.1429 = 1.0562.

National Instrument 81-102 gives money market funds the choice of reporting current yield or current and effective yield. However, money market funds usually provide two yield calculations. Both yields are required to avoid confusion in interpretation. Previously, some funds reported only their current yield, while others reported only their effective yield. Since the effective yield is always higher than the current yield for the same fund, funds reporting only current yield appeared to be generating lower returns, which was not necessarily the case. Confusion is eliminated by providing both yields.

To interpret the yields, you must examine the assumptions made in each yield calculation. First, note that the current yield calculation looks only at the return over the most recent seven-day period and ignores what your client might do with the money if it were paid out. This calculation assumes, therefore, that compounding of returns will not take place.

The effective yield calculation, in contrast, makes the assumption that the yield generated over the last seven days will remain constant for one year into the future, and that the returns earned weekly are re-invested in the fund. Thus, weekly compounding of returns at the current rate is assumed in the effective yield calculation.

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Which of these two calculations is best depends on your point of view. If you are looking for a short-term return, comparable to term deposits and GICs, and do not expect to re-invest the income, then the current yield (which does not assume compounding) is perhaps better. If, however, you are looking for a somewhat longer-term investment, then the effective yield is better, as it assumes the compounding of returns, which is more consistent with longer term investments. Money market fund standard performance data are the effective and/or current yields, computed using data not more than 45 days old.

SAMPLE MONEY MARKET FUND

This examination of a sample money market fund uses hypothetical information to illustrate how this type of mutual fund might operate and the types of investments the fund might contain.

As with most mutual funds, the sample prospectus is designed to avoid repetition by dealing simultaneously with all of the mutual funds distributed by the same distributor. For the money market fund, the investment objective could be:

> *"…to conserve capital while maintaining liquidity and achieving a regular income. For that purpose, the Fund's assets are primarily invested in commercial paper issued and guaranteed by major Canadian corporations and all financial institutions, including Canadian chartered banks, trust companies, and savings and credit unions. The Fund may also invest in Treasury bills issued by the Government of Canada or a province of Canada, short-term debt securities of municipal and school corporations, or in guaranteed funds of Canadian financial institutions. The average weighted duration until maturity of the Fund's portfolio does not exceed 180 days. The Fund plans to maintain the value of its units at approximately $10."*

How are these investment objectives expressed in the portfolio that the fund manager has constructed? First, look at the breakdown of the portfolio investments at the end of December 20X1, presented in pie-chart form in Figure 11.2. Of the whole portfolio, approximately 22% is invested in federal and provincial T-bills, 12% is in bonds maturing within 6 months, and 66% in notes (commercial paper) and cash.

Figure 11.2 | Sample Money Market Fund at Dec. 20X1 (by unamortized cost)

Turning to the Statement of Investment Portfolio (Figure 11.3), note that there are a total of 25 different securities in the portfolio. Of the 25, three are federal T-bills of varying remaining maturities, ranging from three months (April 1, 20X2) to about six months (June 10, 20X2). There are four provincial T-bills and notes of banks and provinces.

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Figure 11.3 | Sample Statement of Investment Portfolio: Sample Money Market Fund

Investment Portfolio as at December 31, 20X1		
	Par Value	**Cost**
Money market securities (87.81%)		
Bank of Montreal, notes		
20X2-02-24	$3,000,000	$2,909,820
Caisse centrale Desjardins, notes		
20X2-02-24	3,800,000	3,760,062
20X2-10-02	2,600,000	2,571,712
Canadian Imperial Bank of Commerce, notes		
20X2-03-29	1,900,000	1,872,070
Diversified Trust, notes		
20X2-01-21	2,000,000	1,983,260
Laurentian Bank, notes		
20X2-02-26	4,300,000	4,260,741
National Bank of Canada, notes		
20X2-01-25	1,500,000	1,463,175
Prime Trust, notes		
20X2-01-22	1,700,000	1,692,554
Province of Nova Scotia, notes		
20X2-06-07	7,200,000	7,028,956
20X2-06-21	3,000,000	2,929,530
Province of Quebec, notes		
20X2-01-06	150,000	148,065
20X2-03-30	4,000,000	3,918,680
20X2-03-31	2,850,000	2,784,123
Reliant Trust, notes		
20X2-02-04	4,000,000	3,947,040
Toronto-Dominion Bank, notes		
20X2-02-26	3,000,000	2,963,850
Treasury Bills – Canada		
20X2-04-01	1,000,000	981,160
20X2-05-27	1,000,000	981,180
20X2-06-10	1,840,000	1,799,686
Treasury Bills – Quebec		
20X2-01-22	3,000,000	2,962,110
20X2-01-29	5,645,000	5,504,742
20X2-09-10	280,000	270,449
Treasury Bills – Newfoundland		
20X2-01-14	2,000,000	1,973,820
Total money market securities		**58,706,785**

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Figure 11.3 | Sample Statement of Investment Portfolio: Sample Money Market Fund

Investment Portfolio as at December 31, 20X1		
	Par Value	**Cost**
Money market securities (87.81%)		
Quebec Public Corporations (3.16%)		
Hydro-Québec		
Euro, 11.000%, 20X2-02-09	2,100,000	2,111,015
Educational Institutions (1.07%)		
Commission scolaire des Portages-de-l'Outaouais		
10.500%, 20X2-06-21	700,000	716,103
Institutional, Commercial and Industrial (7.48%)		
G.M.A.C.		
5.550%, 20X2-04-09	5,000,000	5,002,741
Total bonds		7,829,859
Total investments (99.52%)		**66,536,644**
Cash and net balance payable (0.48%)		318,619
Net assets (100%)		**$66,855,263**

The total portfolio value is stated at cost but is expected to be a good approximation of market value given the stable nature of the securities. The value is about $67 million. Note that the largest single investment is $7.2 million in a Province of Nova Scotia note maturing June 7, 20X2.

The financial statements also include a market review (not presented here). In the **market review**, the fund manager explains what has happened to rates, and therefore the performance, of the fund over the recent past, and why. The fund manager also provides a forecast or outlook for the fund over the next few months. The outlook portion of the market review reflects the fund manager's at the time of the statements. Those views are likely to change as time goes on, and the fund manager can turn out to be wrong.

MONEY MARKET RETURNS

Can you calculate the different kind of money market yields? *Complete the online learning activity to assess your knowledge.*

WHAT ARE MORTGAGE MUTUAL FUNDS?

These funds generally invest in high-quality residential mortgages (usually *National Housing Act* – NHA – insured). Small parts of their portfolio can be invested in cash and bonds and mortgage-backed securities. **Mortgage funds** are in the "fixed-income" category, along with bond funds and preferred dividend funds. All three of these types of funds earn income in the form of interest (for mortgage and bond funds) and dividends (for preferred dividend funds). Unlike money market funds, which also earn interest income, these fixed-income funds can also generate capital gains.

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Mortgage mutual funds are considered to carry higher risk than money market funds but less risk than bond funds. In addition to the fact that mortgage fund returns have been more volatile than money market funds over the last 10 years, the assets that mortgage funds hold have higher default risk. This is because mortgage funds are backed by the creditworthiness of individuals rather the creditworthiness of a government, as in the case of T-bills.

INTRODUCTION TO MORTGAGES

A **mortgage** is a loan secured against real property. It has two main characteristics: an **amortization period**, during which the entire principal amount of the mortgage will be paid off, and a **term**, during which a particular rate of interest on the mortgage stays in effect. Amortization periods range up to 25 years (sometimes longer). Terms can be as long as 10 years and as short as six months. Variable interest rate mortgages are also available.

Mortgages are characterized as either open or closed. An **open mortgage** can be repaid at any time by the mortgagor (the borrower) without paying an interest penalty. A **closed mortgage** can also be repaid prior to the end of the term, but a substantial interest penalty may apply. Because of this penalty, the borrower does not break the term until its end, when the mortgage term reopens for renegotiation. Open mortgages typically have a higher interest cost than closed mortgages because of the repayment feature.

Residential mortgages are **conventional mortgages** if they do not exceed 80% of the appraised value of the property. Mortgage lenders do not generally require insurance on conventional mortgages, because they have good security in case of default. **Non-conventional mortgages** require insurance. Insurance raises the cost of the mortgage by as much as 300 **basis points** (A basis point is 1/100 of a percent). If you negotiate a mortgage at 5%, for example, and are required to pay 75 basis points more for insurance, the mortgage will cost 5.75% (5% + 0.75%).

Under certain conditions, residential borrowers can have their mortgages insured under the *National Housing Act*. The *Act* provides government guarantees in case of default. Mortgage borrowers make "blended" monthly mortgage payments that include principal repayment and interest.

A confusing aspect of mortgage mutual funds involves understanding why a mortgage fund's net asset value should move up or down with changing mortgage interest rates. Recall that fixed-income securities move in the opposite direction to market interest rates. Consider that a mortgage rate, once negotiated between the borrower and lender, is fixed until the end of the term, at which point the rate is renegotiated. Now imagine that you are the fund manager for a mortgage mutual fund and have just bought a $100,000 mortgage at par from a financial institution. Buying the mortgage at par means that the mortgage interest rate and the current rate on mortgages are the same. Assume that the rate is 5% and that your mortgage fund computes net asset value per share (NAVPS) on a daily basis.

What would happen to the NAVPS if mortgage rates suddenly increase to 6%? Of course, only the interest rates on newly negotiated mortgages would increase. The rate on the $100,000 mortgage you bought previously is fixed at 5% until the end of its term. Is that mortgage still worth par value?

To answer this question, think about whether you would be able to sell that mortgage to someone at par. Clearly, if someone had $100,000 to invest today, he or she would be able to buy a mortgage offering an interest rate of 6%. The investor would not pay you $100,000 for a 5% rate. If you wished to sell the mortgage, then you would have to lower your price until the price paid—given the 5% fixed payments to be made—results in a return to the buyer of 6%, the "going rate" on mortgages. In other words, the market value of your $100,000 par value mortgage must fall.

Computing a fund's net asset value per unit means determining the value of the portfolio as if you were going to sell it all today. In the case of a rise in mortgage rates, the price at which you could sell the portfolio today will be lower, so the net asset value will decline. The opposite is true for a fall in mortgage rates. Falling mortgage rates will result in an increase in the value of the mortgage portfolio. When the investment objectives of a mortgage mutual fund suggest the possibility of capital gains, it is referring to times when mortgage interest rates fall.

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Mortgages do not trade on exchanges or on the OTC market. To be fair to new purchasers of a mortgage fund's units, the fund's current market value must be determined prior to completing the purchase, and this can be done only by computing the fund's value as if all of the mortgages were to be sold.

MORTGAGE FUNDS: INVESTMENT OBJECTIVES

The investment objective of mortgage funds is to earn current income through investment in a diversified portfolio of mortgages while at the same time preserving capital. In some cases, the investment objective also includes a desire to earn capital gains, but the emphasis is always on the side of preserving capital.

Mortgage funds are not identical in risk and do not have identical portfolios. The types of mortgages that a mortgage fund can hold vary greatly from mortgage fund to mortgage fund. As a result, the funds' risk levels can vary greatly as well. Some funds specify exactly what kind of mortgages they can invest in. For example, the investment strategy of a typical mortgage fund limits mortgages in the following way:

- First mortgages on Canadian residential and commercial properties that are *National Housing Act* (NHA) insured. This is sometimes referred to as a mortgage "guaranteed by the government."
- Debt instruments issued or guaranteed by the Government of Canada, any Canadian provincial government or agencies of any of these governments.
- Debt instruments issued by Canadian municipalities and companies.

Some mortgage funds restrict investment to first residential mortgages. Other funds invest in commercial and industrial mortgages. Commercial and industrial mortgages have different characteristics from residential mortgages. First, they tend to have high principal amounts, so each mortgage held in the fund is larger. Second, they tend to have longer terms. While residential mortgages have terms from one to three years on average, commercial and industrial mortgages have terms of three to five years.

All mortgage characteristics are important in understanding the risk level of mortgage funds. Two kinds of risks in mortgage funds are default risk and volatility.

Default risk is low for virtually all mortgage funds, because the portfolios are highly diversified. For funds holding residential mortgages, many individual mortgages are required to form a large portfolio. A typical mortgage fund may hold 10,000 to 15,000 individual mortgages.

Mortgage funds, therefore, have low default risk. Most default risk has been removed by holding many mortgages. In addition, most of the mortgages held by funds investing in residential mortgages are either NHA-insured or privately insured against default. Finally, in the case of many mortgage funds, any mortgage found to be in default is bought by the fund's distributor or the distributor's parent company.

The **volatility** of mortgage funds is directly related to the average term of its mortgage portfolio. As with bonds, the longer the average term to maturity, the higher the fund's sensitivity to changes in mortgage interest rates.

Interest rate sensitivity is expected to be lower for mortgage funds than for bond funds for two reasons.

- First, mortgage rates change much less frequently than interest rates on bonds. The decision to change mortgage rates rests with the banks and other mortgage lenders, while the interest rates (or yields) on bonds change when investors bid up or bid down the prices of bonds that trade in the market. This bidding takes place daily.
- Second, mortgages by nature have less interest rate risk than bonds. The reason, in part, is that interest on mortgages is paid monthly, while interest on bonds is paid semi-annually. Another reason is that the average mortgage has a shorter term than the average bond.

From the perspective of both default risk and interest rate risk, mortgage funds are riskier than money market funds but should be less risky than bond funds.

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Many mortgage funds contain additional fixed-income securities. Depending on market conditions, fund managers might decide to hold short-term debt instruments, such as T-bills, in the portfolio, and some mortgage funds hold bonds as well. Some funds might even hold mortgage-backed securities, a type of bond based on the interest and principal to be repaid on a pool of mortgages. What a mortgage fund is permitted to hold as investments is stated in the investment objectives. If you are ever in doubt, just check the portfolio holdings contained in the annual report.

THE RETURNS ON MORTGAGE MUTUAL FUNDS

As you can see from Figure 11.4, mortgage mutual funds are less volatile than bond funds but more volatile than money market funds. Since mortgage fund returns are less volatile (less risky) than bond funds, you should expect mortgage funds to earn a lower return. Over the hypothetical period of 15 years, it does appear that mortgage fund returns (4.42%) have been lower than returns on bond funds (5.31%) on average.

Figure 11.4 | Simple Annual Returns: Mortgage Funds

Source: Bloomberg

The data in Figure 11.4 is consistent with everything you would expect about the relative risk and return characteristics of money market funds, mortgage funds and bond funds. The money market fund achieved a 3.21% annualized return, the mortgage fund achieved a 4.42% annualized return and the bond fund achieved a 5.31% annualized return over the same 15-year period. This is a good example of the relationship between the return and the volatility of returns. However, this does not mean that higher-risk securities will always provide higher returns.

The returns on mortgage mutual funds are made up of two components: interest and capital gains. The interest component is distributed to unitholders at least quarterly and often monthly. **Capital gains** are distributed annually at the end of the year.

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A TYPICAL MORTGAGE MUTUAL FUND

Following is a mock-up of a typical mortgage mutual fund, including its statement of investment objectives and portfolio holdings (Table 11.1). How is the mutual fund manager attempting to put the objectives into practice?

Table 11.1 | Summary of Investment Portfolio (at December 31, 20X1)

Number of NHA Mortgages	Principal Value	Amortized Cost	Current Value	% of Net Assets
Total Mortgages 13,946	$1,182,709,510	$1,180,622,413	$1,206,991,713	89.5
Holdings		**Average Cost**	**Current Value**	**% of Net Assets**
Total Short-Term Notes		$119,520,245	$120,419,571	9.0
Total Portfolio		$1,300,142,658	$1,327,411,284	98.5
Cash and Other Net Assets		$20,684,353	$20,684,353	1.5
Total Net Assets		$1,320,827,011	$1,348,095,637	100.00

The accompanying notes are an integral part of these financial statements.

Statement of Investment Objective, Risk Factors, and Suitability	
Investment Objective	• To provide a high level of income and some capital growth, while preserving capital by investing primarily in first mortgages.
Risks	• Mortgage funds tend to be more stable than bond funds. • There is very little risk that the mortgages in the fund will default, because they are insured by an agency of the federal government.
Suitability	• Appropriate for investors looking for regular income who are uncomfortable with a lot of risk.

Based on the stated objective of holding NHA-insured mortgages, you would expect to see such mortgages occupying a major portion of the portfolio. A look at the Statement of Portfolio Holdings confirms this: NHA-insured mortgages account for 89.5% of the portfolio. Short-term notes (money market securities) make up the next highest percentage at 9%. The rest of the portfolio consists of cash and other assets (1.5%). This is a large mortgage fund with a market value of $1.2 billion. Note that the portfolio is diversified over 13,946 mortgages.

The mortgage fund includes a column called **amortized cost**. This cost reflects the fact that the mortgages may have been added to the portfolio when the market rate for them was different from their fixed rate. Recall that, as with bonds, changes in mortgage rates have an opposite impact on the value of a mortgage. If the market rate is different from the rate on a specific mortgage, then it will have a value different from its par value.

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WHAT ARE BOND AND OTHER FIXED-INCOME FUNDS?

Bond funds invest in all types of bonds. They are considered riskier than mortgage funds and less risky than balanced funds (which contain a selection of stocks). However, it is also true that *individual* bond funds can actually be riskier than individual balanced funds, or even individual equity funds. The point is that the risk characteristics of a fund depend entirely on the composition of its investment portfolio. Some equity funds may be very conservatively managed, while some bond funds may be very aggressively managed.

The investment objective of **fixed-income funds** is to earn current income while preserving capital. Some fixed-income funds also try to earn capital gains. The principal fixed-income mutual funds are mortgage funds and bond funds. Other fixed-income mutual funds are the preferred dividend fund, investing primarily in preferred shares, and the **short-term bond fund**. The short-term bond fund is a cross between a money market fund and a bond fund and has characteristics of both.

This section examines the investment objectives of bond funds, compares the performance of bond funds to other types of investments and funds, reviews the performance reporting of bond funds in financial publications or online and then studies a hypothetical fund in some detail. Also included is a look at other fixed-income funds, specifically the characteristics of preferred dividend and short-term bond funds.

INTEREST RATE RISK AND THE CONCEPT OF DURATION

Interest rate risk is the fundamental risk factor for fixed-income securities such as bonds, mortgages and preferred shares. Recall that as interest rates move up, the value of a fixed-income security falls, and as interest rates fall, the value of a fixed-income security moves up.

Also recall that as the **term to maturity** on fixed-income securities becomes longer, the more sensitive they become to changes in interest rates. For example, a 20-year bond will be much more sensitive to interest rate changes than a three-year bond. In addition, if a bond has a lower coupon rate, its value will tend to be more sensitive to interest rate changes than a bond with a higher coupon rate. For example, a bond with a 3% coupon will be more sensitive to interest rate changes than a bond with a 7% coupon. To make matters more complicated, there are additional factors that influence a bond's sensitivity to interest rate changes.

As mutual fund sales representatives, we would like to have a simple number or index that can tell us which of two bonds will be more sensitive to a change in interest rates without having to examine the bonds' features directly. We would also like to be able to look at two bond portfolios and use the same simple number or index to say which of the two portfolios is more sensitive to interest rate changes. Fortunately, such a number exists; it is called **duration**. You have seen in Chapter 8 that as a bond's duration increases, its interest rate sensitivity increases as well. The same is true of a bond portfolio.

Duration is expressed in years. It is sometimes referred to as a bond's **time-weighted maturity**. This is an important measure for fund managers because they can use it to decide how much interest rate risk a fund should bear, based on its investment objectives and the manager's outlook for changes in interest rates:

- If fund managers believe that interest rates are ready to fall, then they will increase the duration of the bond portfolio by replacing short-term, high coupon bonds with the longer term, lower coupon bonds in the portfolio (that is, make it more sensitive to the fall in rates so that the portfolio will increase in value).
- If fund managers believe rates will rise, then they will shorten the duration of the portfolio (by replacing long-term, low coupon bonds with the shorter term, higher coupon bonds in the portfolio) to make it less sensitive to interest rate changes. By shortening the portfolio's duration, they will protect the portfolio from a decline in value to a certain extent as rates rise.

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Duration is not the same as a term to maturity, but they are related. For all bonds except zero coupon bonds, the duration is always less than the term to maturity. Recall that zero coupon bonds are sold at a discount to face value, do not pay interest, and mature at face value, so for zero coupon bonds the duration is equal to the term to maturity.

Most mutual funds report the durations of their fixed-income funds. Duration is a useful measure for mortgage funds, bond funds, preferred dividend funds and balanced funds. A mutual fund company's fund facts document and simplified prospectus, regarding the investment strategy of its bond fund, may read:

The fund's policy is to maintain a minimum duration of six years.

The mutual fund company may also indicate that the duration of its income fund will be between three and 10 years. From these data, you know that a fixed-income fund with a duration of 3 years is less interest-rate sensitive than a fixed-income fund with the duration of 10 years. Other factors such as default risk and market risk (for balanced funds) must be included when you consider total risk, but duration provides a clear answer to the question of relative interest-rate risk and volatility.

BOND MUTUAL FUNDS: INVESTMENT OBJECTIVES

Bond mutual funds are designed to provide current income and capital preservation with some potential for capital gains. Conservative bond funds will put more emphasis on the current income and capital preservation side, while more aggressive funds seek out higher capital gains.

To provide current income, a fund manager primarily invests in higher-coupon government securities and corporate bonds. Higher-coupon securities provide higher current cash flow, and government securities have essentially no default risk. **Corporate bonds**, especially those with lower credit ratings, offer better yields than government bonds to compensate for their higher risk. To provide capital gains potential, the manager invests in bonds with a longer duration when interest rates are expected to fall.

Until the late 1970s, bonds were considered very stable types of investments, suitable for risk-averse investors. Since that time, with the increased volatility of interest rates, they have sometimes proven as risky as equities and at times even more volatile than equities. Mutual fund sales representatives need to be aware that some clients might still believe that bond funds are stable investments. Clients should be informed that this is not really the case today given fluctuating interest rates. Also, different bond funds can take quite different positions regarding risk. If your bond fund has done much better than other bond funds, then its duration has almost certainly been higher. Investing in fixed-income securities does not mean that a fund has the same objective or risks as other bond funds.

THE RETURNS ON BOND FUNDS

Figure 11.5 presents the simple annual returns for bond funds over a hypothetical 15-year period, comparing bond fund returns to the returns on equity mutual funds.

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Figure 11.5 | Simple Annual Returns: Canadian Bond Funds

Source: Bloomberg

Similar to money market funds, bond fund returns are lower than the returns on the investments (long-term bonds) that constitute the funds. This lower return might be the result of bond fund management fees. The management expense ratios for bond funds are around 2%. Also, the figure shows that in comparison to equity funds, bond funds have been less volatile.

The average returns over the 15-year period provide a useful lesson about risk. Based on the volatility of returns, you would expect equity funds to perform better than bond funds. Equity funds earned 6.17% on average, while bond funds earned 5.31%. Even with the dramatic volatility equity funds return experienced in years 13 and 14, equity funds performed better than bond funds over the 15-year period.

A TYPICAL CANADIAN BOND FUND

From the fund facts document, simplified prospectus or annual report, the investment objective of a typical bond fund may read as follows:

Objectives	To provide high income with some capital growth. Invest in high quality Canadian government and corporate debt securities with terms to maturity of more than one year.

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This statement of objectives is similar to that of other bond funds. Note that this fund states that securities will likely have a term to maturity of more than one year. This fund would be very conservative if the average term to maturity were close to one year, which is a very short duration.

Given the maturity breakdown of the sample portfolio, the fund reports a duration of 5.3. Other than cash and money market (comprising 6.4%), 49.8% of holdings have maturities of less than 5 years, 29.7% have maturities of 5-10 years, and 16.9% have maturities of more than 10 years.

Figure 11.6 | Typical Bond Fund Sectors

The sector breakdown of a typical bond fund, shown in Figure 11.6, might read as follows:

- 59% is invested in the Government of Canada bonds
- 10% is invested in provincial bonds
- 24% is in corporate bonds
- 4% is in money market securities
- 3% is in cash

SHORT-TERM BOND FUNDS: INVESTMENT OBJECTIVES

A short-term bond fund is part money market fund and part bond fund. You would expect its investment objectives to reflect this combination. A short-term bond fund's objectives are to preserve capital and generate better current income than is likely from a money market fund. Although there is some capital gain potential, you would not expect this to be a key objective given the short duration of this type of fixed-income fund.

In the past, short-term bond funds were often regarded as "aggressive" money market funds. This is not unreasonable, since short-term bond funds typically have a large percentage of their investments in money market securities. However, the Canadian Securities Administrators have been increasingly concerned about the possibility of misleading consumers. They do not want consumers to see the name "money market" and immediately believe that the fund must be very low risk. For this reason, the only funds allowed to be called money market funds are those meeting certain criteria having to do with the maturity of the assets held in the portfolio. Money market funds cannot have a maturity longer than 364 days.

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Funds consisting of short-term domestic and foreign government bonds can have different objectives, risk levels, and investment strategies.

Table 11.2 | Examples of Short-Term Government Bond Funds

	XYZ Short-Term Bonds	ABC Short-Term Bonds
Objective	Maximize income while simultaneously preserving capital and liquidity by investing primarily in short-term bonds.	Provide a high current income while maintaining reasonable unit price stability. The net assets of this Fund are invested only in term deposits, treasury bills and other money market instruments. It may also be invested in debt securities having a term to maturity of five years or less, issued by Canadian federal, provincial or municipal governments or a public body or agency established by them, the World Bank, and the U.S. government.
Investment Strategy	Invests mainly in short-term bonds of the Canadian or provincial governments and their agencies. The Fund may invest up to 20% of its portfolio in short-term U.S. government bonds. The weighted average term to maturity of the Fund's portfolio is limited to a maximum of five years. The Fund's portfolio is actively traded to realize capital gains when available.	The Fund does not invest more than 20% of its assets in debt securities of the World Bank and the U.S. government together, provided, however, that the portion of assets invested in debt securities of the World Bank does not exceed 10%.
Risks	The unit price, or net asset value of the Fund, varies with movements in interest rates. Since the Fund can invest in bonds issued in U.S. dollars, the unit price may also be affected by changes in U.S. currency exchange rates against the Canadian dollar.	The principal risks of this Fund are referred to in the prospectus introduction and later under "Risks Relating to Interest Rate Fluctuations" in order for all risks to be disclosed and explained to the investor. The short-term investment objectives restrict the portfolio to maturities of less than five years. If most of the securities had terms close to five years, you would think of this fund as a "medium-term" bond fund, but it is likely that few of the securities would have a five-year maturity.
Distributions	The Fund's income is distributed quarterly.	The Fund's income is distributed monthly.

PREFERRED DIVIDEND FUNDS: INVESTMENT OBJECTIVES

Preferred dividend funds have the goal of earning current dividend income while at the same time preserving capital. As with other fixed-income funds, there is a limited potential for capital gains.

The decision to call one fund a preferred dividend fund and another an equity fund has more to do with the stability of the dividend income the fund expects to earn than with the precise composition of its investment portfolio. If the investment objective is high current dividend income, then you know that the most stable form of dividends is from preferred shares. Therefore, you would expect preferred shares to play a major role in the portfolio. Common shares of some firms also pay very regular dividends, however. In other words, a preferred dividend fund need not hold only

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preferred shares in its portfolio. It may even hold mostly common shares and still be called a preferred dividend fund. However, when most of the shares held are common shares, the fund is referred to simply as a "Dividend Fund."

There are two reasons for wanting to earn dividend income as opposed to the interest income expected from bond funds.

- First, dividends are paid by securities having a higher-risk profile than bonds (especially government bonds), such as preferred shares and the common shares of "mature" companies. Given the higher risk, these securities are expected to earn higher returns than debt securities.
- Second, dividend income from Canadian sources is taxed at a lower rate than interest income, due to the dividend tax credit.

Preferred dividend funds are not as common as other types of fixed-income funds. Two examples follow.

Table 11.3 | Examples of hypothetical Preferred Dividend Funds

	Guarded Monthly Dividend Fund	The Canada Bank Dividend Fund
Investment Objectives	To generate a high level of dividend income and to preserve capital.	To provide high dividend income while emphasizing the preservation of the capital investment of unit holders. This Fund will invest the majority of its assets in preferred shares of Canadian issuers.
Principal Investments	High-quality preferred shares of Canadian corporations. "High quality" preferred shares means that fund managers likely restrict their selection to preferred shares rated either P1 or P2, the two highest-quality ratings for preferred shares. The investment objectives are reflected in the make-up of the December 31, 20XX portfolio. 64.2% of the portfolio is invested in different P1 and P2 preferred shares; 11% of the preferred shares are floating-rate rather than fixed-rate.	The December 31, 20XX Annual Report indicates that preferred shares make up 66% of the portfolio. Money market securities, including T-bills and commercial paper, account for another 10%.
Principal Risks	The P1 and P2 preferred shares ratings reduce significantly the default risk of the portfolio. The principal risk is the variability in value due to interest rates risk.	The principal risks referred to in the introductory paragraph are completed by "Risks Relating to Financial Markets Fluctuations" and "Risks Relating to Interest Rate Fluctuations."
Distributions	Pays dividends monthly from the Fund's income, capital gains or from capital. The Fund will generally distribute enough in capital gains dividends so that it receives refunds of all tax it would otherwise pay. The requirement of generating dividend income from "Canadian corporations" is there to make sure that the dividend tax credit can be applied to dividend income.	Income distributions are made quarterly and capital gains are distributed once a year.

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Note that you must look at the objectives and portfolio of a fixed-income fund, not just its name, to determine if it is actually a "preferred dividend fund" as described in this section or some other type of fund.

Case Study | A Preference for Preferreds: Using Preferred Dividend Funds to Generate Tax-Effective Income (*for information purposes only*)

John is meeting with Terry, his mutual fund advisor, to discuss options to invest new funds he has from the sale of a vacation property. Retired, John lives off of the income produced by his investment portfolio. He is a conservative investor who values low volatility and income-focused investments over higher volatility and capital growth-focused ones. Terry has structured John's portfolio so that it is made up of mostly of income-producing mutual funds, such as traditional bond and mortgage funds. He has also made sure that John's portfolio has a portion of it in money market funds to meet short-term cash flow and any emergency needs.

John's investment income is fairly high, so for tax reduction purposes, he asks Terry about conservative investment options that produce relatively low volatility returns, preserve capital but that produce tax-effective returns.

Terry explains that preferred dividend funds would be an ideal fit for John's portfolio given his stated desire for a stable income-producing investment that produces tax-effective income. Terry goes on to explain to John that preferred shares generally produce higher levels of income than bonds because they are perceived as slightly riskier. For instance, companies must pay bond holders the interest payments owed on the bonds before paying dividends to preferred shareholders. However, Terry explains that the fund he would recommend to John only purchases top-rated, blue chip companies' preferred shares with excellent track records of paying their dividends.

While they rarely experience capital growth, the preferred shares in the fund do produce a steady quarterly cash flow of dividends that will support John's retirement income needs, while also generally producing a low volatility investment experience. Lastly, John will benefit from the dividend tax credit on the fund's dividend income, significantly reducing taxes on that investment income versus the taxes on the interest income produced by bond and mortgage bond funds.

MONEY MARKET TERMINOLOGY

How familiar are you with money market mutual fund terminology? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

1. Compare and contrast the investments objectives and features of money market funds, mortgage funds and bond and other fixed-income funds.
   - The investment objective of a money market fund is to earn stable returns by investing in short-term money market securities.
   - The investment objective of mortgage funds is to earn current income through investment in a diversified portfolio of mortgages while at the same time preserving capital.
   - Bond mutual funds are designed to provide current income and capital preservation with some potential for capital gains.
   - A short-term bond fund's objectives are to preserve capital and generate better current income than is likely from a money market fund.
   - Preferred dividend funds have the goal of earning current dividend income while at the same time preserving capital.
2. Differentiate the two methods of calculating yield of money market funds.
   - Both the current yield and the effective yield use the seven-day yield. The seven-day yield is calculated by dividing the ending net asset value by the fund's initial net asset value and then subtracting 1.

     $$\text{Seven-day yield} = \frac{\text{Ending Net Asset Value}}{\text{Initial Net Asset Value}} - 1$$

   - The current yield for a money market fund is calculated as the most recent seven-day yield on the fund, adjusted to an annual rate. The formula is:

     $$\text{Current yield} = \left(\text{Seven-day yield} \times \frac{365}{7}\right)$$

   - The effective yield is computed using the seven-day yield and the following effective yield formula.

     $$\text{Effective yield} = \left[(1 + \text{Seven-day yield})^{365/7} - 1\right]$$

3. List and describe the investment objectives, comparative returns and the volatility of the different types of fixed-income mutual funds.
   - The volatility of returns of fixed-income mutual funds are, from lowest to highest:
     - money market funds
     - mortgage funds
     - bond funds
     - preferred dividend funds
4. Describe the impact of interest rate risk on fixed-income securities and the concept of duration as it applies to conservative mutual funds.
   - Interest rate risk is the fundamental risk factor for fixed-income securities such as bonds, mortgages and preferred shares. As interest rates move up, the value of a fixed-income security falls.
   - Duration is a measure of the sensitivity of a bond's price (or the price of a portfolio of bonds) to changes in interest rates. The higher the duration of the bond (or the portfolio of bonds), the more it will react to a change in interest rates.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 11 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 11 FAQs.

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Riskier Mutual Fund Products 12

CONTENT AREAS

- **What Are Equity Mutual Funds?**
- **What Are Balanced Mutual Funds?**
- **What Are Global Mutual Funds?**
- **What Are Specialty Mutual Funds?**

LEARNING OBJECTIVES

1 | Describe and compare and contrast the composition of the different types of equity mutual funds.

2 | List and describe the investment objectives, comparative returns and the volatility of the different types of equity mutual funds.

3 | Describe the features and key types of specialty mutual funds.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

balanced mutual funds

currency forward contract

equity growth funds

equity index funds

equity mutual funds

foreign exchange risk

fund of funds

fund wraps

glide path

global equity funds

global mutual funds

international funds

market risk

natural resource funds

portfolio allocation service

precious metals funds

small cap funds

specialty mutual funds

standard equity funds

target-date funds

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INTRODUCTION

This chapter covers riskier mutual fund products ranging from equity and balanced mutual funds, which are toward the middle of the risk-return spectrum, to global and specialty mutual funds, which are at the higher end of the risk-return spectrum. Mutual fund sales representatives should not, however, rely on a fund's name or categorization to determine its suitability for clients; instead, you must do your homework and take a close look at a mutual fund's fund facts document, prospectus and annual report. A balanced fund may turn out to be a high-risk product if it is slanted aggressively towards equities, while a specialty fund may be lower risk because of its investment objective and portfolio composition.

WHAT ARE EQUITY MUTUAL FUNDS?

Equity mutual funds invest in the common and preferred shares of publicly-traded companies. Equity mutual funds as a group have the goal of earning capital gains, sometimes with a current dividend income component. They are the riskiest of the three basic mutual fund types—money market, fixed-income, and equity funds—and are suitable primarily for clients with longer investment time horizons.

It is difficult to discuss equity mutual funds as one mutual fund category. The problem is that although all equity mutual funds share the objective of investing in equities, the particular equities they select give different funds very different risk and return characteristics. This chapter examines Canadian equity mutual funds in terms of three fairly distinct types: "standard" equity funds, equity growth funds and equity index funds.

What are the investment objectives of these types of equity funds, what are their return characteristics in comparison to the S&P/TSX Composite Index, and what are some examples of equity funds?

STANDARD EQUITY FUNDS

There are no mutual funds that distributors refer to as "standard" equity funds. The term is used here to distinguish this type of fund from the two other types discussed. A **standard equity fund** seeks to earn some combination of dividend income and capital gains from investment in Canadian common stocks. This objective appears to be similar to that of a preferred dividend fund. The difference between the two is that an equity fund usually has a much stronger capital gains focus. Note as well that equity funds make no specific attempt to preserve capital; in other words, equity funds are willing to put capital at substantially greater risk than preferred dividend funds in the hope of earning higher returns.

To earn both dividend income and capital gains, portfolio fund managers must seek out common shares that pay dividends generally but also have some potential for capital appreciation. The most conservative of these equity funds hold common shares of large capitalization firms with strong dividend records. That is, these firms almost always pay their quarterly dividend. The capital appreciation potential for this type of shares is, however, limited.

EQUITY GROWTH FUNDS

The investment objective of an **equity growth fund** is capital gains. Some dividend income may be earned, but probably not much. Equity growth funds seek out smaller firms that do not have the financial ability to pay dividends. They need all the funds they can obtain in order to grow. If these firms are successful, their share prices should increase to reflect the growing value of the firm.

The key risk factor that equity growth funds present to you and your clients is that smaller, growing firms have a greater potential for failure than larger, well-established firms. In addition, these growth firms often trade at very high price/earnings ratios (recall that the P/E ratio is the price paid for a share relative to the profit earned per share). This tends to make a growth firm's share price particularly volatile, causing equity growth funds to have a lot of volatility.

As with standard equity funds, equity growth funds can be conservative or aggressive for their class. An aggressive growth fund invests exclusively in smaller, lesser-known firms. Sometimes these types of funds are called **small cap funds**.

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"Small cap" stands for small capitalization, which means that the market value of the equity of the firm is relatively low, probably because the firm itself is small. In this chapter, small cap funds are treated as specialty mutual funds.

Recall that you can calculate the market value of a firm's equity in the following way:

Market Capitalization = Number of shares outstanding × Current Market Share Price

In contrast to aggressive growth funds, more conservative equity growth funds seek out small, growth-oriented firms that have higher market capitalizations than small cap funds.

EQUITY INDEX FUNDS

An **equity index fund** has the goal of replicating the movements of a market index. In Canada, that particular index is often the S&P/TSX Composite Index. Equity index funds intend to do this by constructing an investment portfolio that has similar weightings to the index it tries to replicate.

For example, if Company ABC represents 4% of the chosen index, the equity index fund would include 4% of Company ABC shares. And so on for most of the stocks represented in the index. Index funds generally do not hold all of the stocks represented in the index they try to replicate. Some very illiquid stocks, or those that have a very small weighting in the index may not be included in the index fund.

Equity index funds typically generate capital gains, and are also likely to earn a certain amount of dividend income simply because some of the stocks in the index will pay dividends. This is not always the case, however. Some equity index funds do not own equities at all. Instead, they hold risk-free investments like T-bills and purchase derivatives that closely replicate the index return.

EXAMPLE

An index fund can construct its portfolio by buying Canadian T-bills and S&P/TSX 60 Index Futures. The return from that combination of T-bills and futures will mimic the return on the Index, but the returns will be made up of interest income from the T-bills and the futures contracts, not from dividends and capital gains on the stocks underlying the Index.

Equity index funds appeal to clients who believe strongly in market efficiency and think that portfolio managers generally lack the skills to beat the markets consistently. There is the added benefit of lower management fees, due to the fact that equity index funds are easier to construct and manage than other types of equity funds. As a result, investing in an index fund is a lower-cost way for your clients to pursue a passive investment strategy.

An alternative to index funds are exchange-traded funds (ETFs). These are discussed in greater detail in Chapter 13. In Canada, ETFs are traded on the Toronto Stock Exchange and are bought and sold through appropriately licensed investment advisors or discount brokers.

A WORD ABOUT DERIVATIVES

Within specified guidelines, mutual funds are permitted to use derivative securities. Recall from Chapter 7 that derivatives are financial instruments, such as futures and options that derive their value from the value of underlying securities such as bonds, stocks and indexes.

This means, for example, that equity mutual funds are allowed to use futures contracts on stock market indexes to hedge the value of their portfolios. Equity funds also are allowed to take speculative positions on stock market indexes within certain limits defined under National Instrument 81-102. Speculative positions may have an underlying value of not more than 10% of the value of the mutual fund's portfolio.

The difference between a hedger and a speculator is that a hedger uses derivatives as a kind of insurance policy against the decline of the portfolio. A speculator is simply taking a bet on the future movement of the market. Most mutual funds do not permit their managers to take speculative positions in derivatives, but they do permit them to hedge the value of the portfolio by using them. What a manager is permitted to do is specified in the fund's simplified prospectus.

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RESPONSIBLE INVESTMENT

Responsible investment (RI) refers to the incorporation of environmental, social and governance (ESG) factors into the selection and management of investments. There is growing evidence that incorporating ESG factors into investment decisions can reduce risk and improve long-term financial returns. ESG issues are also some of the most important drivers of change in the world today.

In Canada, RI gained prominence during the 1970s and 1980s. At that time, it was commonly known as ethical or socially responsible investing. Since then, shareholder activism or corporate engagement has subsequently become commonplace.

Today, there is no one-size-fits-all strategy or approach. Responsible investors practice both values-driven approaches, which incorporate the investors' moral or ethical beliefs, and valuation-driven approaches, which consider the materiality of ESG issues. There are numerous different strategies available to serve the diversity of responsible investors, including ESG integration, shareholder engagement, screening, thematic, and impact investing. On the more technical side, there are even more sub-strategies, including carbon efficiency, ESG momentum, tilting, smart beta, and others.

ESG ISSUES

ESG issues are some of the most important drivers of change in the world today. They are also critical economic issues with significant implications for businesses and investors. Environmental, or "E", issues generally include the conservation of our natural resources, climate change, water and waste management, and more. Social issues are those that relate to people and society and they include human capital management, diversity and inclusion, human rights, and Indigenous and community relations. Governance issues relate to the controls, standards, and processes for running a company and overseeing its operations.

Examples of ESG issues include:

- Climate Change
- Water Scarcity
- Supply Chain
- Indigenous and Community Relations
- Executive Compensation
- Diversity and Inclusion

There are many sources of ESG information, including corporate ESG ratings and rankings, corporate sustainability reports, in-house research, ESG information disclosure in securities filings, and media coverage.

DID YOU KNOW?

Equity funds are not the only RI choices available to investors. Responsible investments are found in all major asset classes and investment vehicles, including:

- Equities
- Fixed income (corporate bonds, green bonds, sustainability bonds, community bonds, etc.)
- Money market
- Alternative investments such as impact investments
- Real estate
- Mutual funds
- Exchange-traded funds
- Guaranteed investment certificates
- Segregated funds

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RETURNS ON EQUITY MUTUAL FUNDS

Figure 12.1 presents the hypothetical 15-year return performance of equity mutual funds and equity growth mutual funds in comparison to Toronto Stock Exchange returns and money market funds. The growth funds are represented by returns from the small or mid cap equity funds category.

Figure 12.1 | Simple Annual Returns: Equity Mutual Funds

Source: Bloomberg

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The average return performance of both types of equity funds parallels that of the S&P/TSX Index, and both are much more volatile than the returns on money market funds. In addition, the data indicate that the average return on the S&P/TSX Index was 3.9% and the average return of equity funds was 6.2%. The average return on money market funds over the same period was 3.2%. The average performance of equity growth funds was 6.6%. Because of the global downturn in Year 13, where markets around the world experienced losses ranging from 30% to 40% of their value, the extreme volatility had a strong negative impact on the reported 15-year returns by equity funds.

HYPOTHETICAL EXAMPLES OF EQUITY FUNDS

The following examples compare three different types of equity mutual funds—blue chip, growth, and index funds—in terms of their investment objectives, portfolios, and investment strategies.

CRYSTAL CANADIAN BLUE-CHIP FUND

The investment objective of the Crystal Canadian Blue-Chip Fund is:

> *"…to seek the greatest potential returns while accepting the greater volatility. Crystal Canadian Blue-Chip Fund maintains a diverse portfolio of equity securities of Canadian companies listed on Canadian stock exchanges that are considered likely to benefit from prevailing and anticipated economic conditions."*

This investment objective is entirely consistent with that of a standard equity fund. Note that the Fund will only invest in exchange-traded stocks, as opposed to OTC (over-the-counter) stocks. This suggests a conservative approach, since stocks traded OTC may be less liquid and their prices also may not reflect the most current information.

The portfolio of this Fund is summarized below and presented in Figure 12.2. Note that Canadian equities account for 96% of the portfolio. Short-term notes account for the rest. For a typical breakdown of equities within the various industries, see the example of the growth company fund that follows this one.

Crystal Canadian Blue-Chip Fund Asset Allocation	
Equities	$323,061,694
Short term Notes	$13,839,150
Total	**$336,900,844**

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Figure 12.2 | Crystal Canadian Blue-Chip Fund Portfolio

Canadian equity funds may also have two features that differ from the Crystal Blue Chip Fund example. First, many are permitted to hold foreign equities. Second, other portfolios may contain greater amounts of short-term notes, T-bills and cash.

There are two reasons for holding cash or cash-equivalents.

- One reason relates to transactions. Fund managers like to have some cash reserved to meet redemption demands of unitholders and be able to buy attractively priced securities should they become available.
- Another reason for holding cash is that managers may want to take a defensive position in relation to the equity markets in general. In other words, they are concerned about the performance of equity markets over the short run and do not want to put all the fund's assets at risk in that market. When they feel that market conditions have improved, fund managers will likely decrease their cash holdings by buying equities.

CRYSTAL CANADIAN GROWTH COMPANY FUND

The fund objectives of the Crystal Canadian Growth Company Fund are to achieve long-term capital growth.

Fund investments	Primarily equity securities of Canadian companies judged to have the potential for above-average growth.
Fund focus	The Fund tends to focus on small- and medium-sized companies, but may also invest in larger companies.
Special risks	The share prices of smaller or less well-known companies tend to fluctuate more than the share prices of larger companies because of the greater uncertainty of investing in less established businesses. Smaller companies may have limited product lines, markets, management expertise or financial resources, making them more vulnerable to setbacks.

According to the following information, also shown in Figure 12.3, the foreign stock component is about 11% of the value of the portfolio. The Canadian equity portion of the portfolio is made up of stocks from many sectors. The single largest sector is "Industrial Products" representing about 20% of the portfolio's value.

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Crystal Canadian Growth Company Fund Asset Allocation		
Domestic Equities		
Communication & Media	$281,302,000	
Conglomerates	$113,208,000	
Consumer Products	$123,555,000	
Financial Services	$67,700,000	
Industrial Products	$411,104,000	
Merchandising	$117,869,000	
Oil and Gas	$164,940,000	
Paper and Forest Products	$114,139,000	
Real Estate	$31,778,000	
Transportation	$122,979,000	
Utilities	$41,936,000	
Sub-total	$1,590,510,000	(77%)
Foreign Equities	$228,875,000	(11%)
Total Equities	$1,819,385,000	(88%)
Canadian Govt. T-Bills	$245,089,000	(12%)
Total Investment Portfolio	$2,064,474,000	

Figure 12.3

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CRYSTAL CANADIAN INDEX FUND

The investment objective of the Crystal Canadian Index Fund is:

> *"… to provide long-term growth of capital primarily by purchasing Canadian equity securities to track the performance of a Canadian equity market index."*

The Fund seeks to achieve its investment objective by tracking the performance of a generally recognized index of Canadian equity market performance (the "Recognized Canadian Index"), currently the S&P/TSX Composite Index. The number of securities comprising the Recognized Canadian Index in which the Fund actually invests from time to time will depend on the size and value of the Fund's assets. The Fund will therefore be rebalanced with a frequency and degree of precision that seeks to track the Recognized Canadian Index as closely as possible, consistent with minimizing trading costs.

This index fund is designed to mimic the S&P/TSX Composite Index while at the same time keeping trading costs low. This is entirely consistent with the objectives of Index funds.

The portfolio of this Fund would be consistent with its objectives. Its holdings would consist of S&P/TSX Composite Index stocks with possibly a small percentage of the stocks not belonging to the Index. Portfolio managers for the Fund would construct a portfolio with essentially the same stocks and weightings as the Index.

WHAT ARE BALANCED MUTUAL FUNDS?

Balanced mutual funds invest a percentage of their assets in fixed-income securities and a percentage in equities. They are often referred to as "hybrid" products, because they are part fixed-income fund and part equity fund. Balanced mutual funds have the objective of earning some amount of both current income and capital gains while at the same time preserving capital.

Balanced funds ideally provide a "balanced" mix of safety, income and capital appreciation. These objectives are sought through a portfolio of fixed-income securities for stability and income, plus a broadly diversified group of common stock holdings for diversification, dividend income and growth potential. The balance between defensive and aggressive security holdings is rarely 50-50. Rather, managers of balanced funds adjust the percentage of each part of the total portfolio according to current market conditions and future expectations.

INVESTMENT OBJECTIVES OF BALANCED MUTUAL FUNDS

As noted above, balanced mutual funds have the objective of earning some amount of both current income and capital gains while at the same time preserving capital. Thus, balanced mutual funds have characteristics of both fixed-income funds (that earn current income) and equity funds (that earn capital gains).

The distinguishing feature of balanced mutual funds is the way they go about meeting their investment objectives. Portfolio managers frequently attempt to shift the proportions of investments in fixed-income and equity securities in keeping with changing market conditions.

- When interest rates have peaked, managers want to be in fixed-income securities.
- When the stock market is set for an increase, they want to be in stocks.
- When both bond and stock markets are volatile, they will hold large amounts of money market securities. In other words, balanced mutual fund managers attempt to time the market to get the best returns depending on market conditions.

A common misconception is that a balanced fund's objective is to hold a "balance" between stocks and bonds. This is not the case. Nevertheless, balanced mutual funds typically hold both debt and equity securities in the portfolio at all times. While fund managers might shift the portfolio toward debt or equity, they do not as a rule go to 100% in either direction, as that would be inconsistent with their "middle-of-the-road" investment objectives.

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While most balanced mutual funds attempt to time the market to some extent, some do not. Instead, they hold fixed proportions of debt and equity securities over the longer term.

RETURNS ON BALANCED MUTUAL FUNDS

Since balanced mutual funds are part bond fund and part equity fund, you might expect them to perform mid-way between the performances of the two funds. If the efforts at market timing succeed, however, balanced mutual funds should earn returns on bond funds in periods when bonds outperform equities, and returns on equity funds when equities outperform bonds. Figure 12.4 compares the performance of equity funds, bond funds and balanced mutual funds during a hypothetical 15-year period.

Figure 12.4 | Simple Annual Returns: Balanced Mutual Funds Compared with Bond Funds and Equity Funds

Source: Bloomberg

Since balanced mutual funds are composed of both bonds and equities, their returns generally fall somewhere between bond fund returns and equity fund returns. As you can notice in figure 12.4, balanced funds returns were more volatile than bond funds returns and less volatile than equity funds returns over the 15-year period.

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HYPOTHETICAL EXAMPLES OF BALANCED FUNDS

The fundamental nature or features of the Crystal Balanced Fund is stated in the fund facts document and prospectus as follows:

> *"This Fund invests primarily in Canadian equities, bonds and short-term debt securities, but may also invest in foreign securities. The objective of the Fund is to provide a combination of capital growth and modest income at a competitive rate of return for a balanced-oriented client. The percentage of the Fund invested in each asset class is adjusted in response to changes in the market outlook for each asset class."*

The Summary of Investments and Other Net Assets presented in Figure 12.5 indicates that the portfolio of the Crystal Balanced Fund consists of 37% Canadian equities, 17% foreign equities and 46% bonds.

Figure 12.5 | Summary of Investments in a Balanced Fund

TARGET-DATE FUNDS

Target-date funds (also referred to as target-based funds or life-cycle funds) have two characteristics that distinguish them from other mutual funds: a maturity date and a glide path.

Investors who buy this product generally select maturity dates that match a certain life goal or target date in the future (e.g., date of retirement).

The **glide path** refers to changes in the fund's asset allocation mix over time which allows the fund to pursue a growth strategy by holding more risky assets in the early years of the fund's life and then gradually reduce the risk of the fund as the target date approaches. The adjustment is made automatically by the fund manager without any action from fund holder. Target-date funds are structured on the assumption that risk tolerance and risk capacity declines as investors grow older.

These funds have their own category under the CIFSC classification. Upon maturity, target-date funds are moved out of the target-date group and included in the appropriate fixed income or balanced fund category.

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EXAMPLE

An investor who plans to retire in 2030 could buy a 2030 target-date fund. The asset allocation may gradually move from 80% equity and 20% fixed income in the early years to an asset allocation of 20% equity and 80% fixed-income by the target date.

The increase in popularity of target-date funds is driven by demographics—baby boomers in Canada will retire in significant numbers over the next 15 to 20 years.

Case Study | Targeting Education: Saving for Emma (*for information purposes only*)

Ryan is meeting with his clients, Carol and Kevin. The couple has a two-year-old daughter, Emma. With the rising cost of education, Carol and Kevin want to begin saving for Emma's post-secondary education as soon as possible. They anticipate she will begin her post-secondary education around age 17.

Ryan establishes that Carol and Kevin's risk profile is such that they have a high-risk tolerance and a relatively high-risk capacity and that their investment time horizon is long enough to allow them the ability to take a reasonable amount of risk to achieve their long-term goal of growth.

Given their investment profile, Ryan recommends a Target Education Fund to meet the couple's education funding needs for Emma. With 15 years until Emma will begin drawing down the portfolio to fund her education, Ryan recommends the Crystal Target Education 2035 Fund (the fund).

Ryan explains to Carol and Kevin that the fund has a target maturity date of 2035, meaning that the fund's glide path works to grow the fund in the early years and to gradually reduce risk as the target date of 2035 approaches. The fund is more heavily-weighted in equities in the early, growth-orientated years. Over time, the fund manager will gradually reduce the equity portion of the fund's holdings and increase its bond weighting, reducing risk as the target date approaches.

In its final few years, the majority of the fund's holdings will be short-term bonds and money market funds to ensure that its volatility and risk are very low. In the last year before its maturity date, it will hold 100% money market funds, securing the savings of investors as their draw down period begins in 2035. For Carol and Kevin, this means that they only need to focus on saving and can leave the investment management to the fund manager, comfortable in the knowledge that the fund will be managed appropriately to achieve their goal of funding Emma's education.

WHAT ARE GLOBAL MUTUAL FUNDS?

Global mutual funds, as the name suggests, hold assets from many countries in their portfolios. Technically, a global mutual fund can hold securities from any country, including Canada. The term **international fund** is sometimes used to describe a fund that invests anywhere except Canada. Some mutual funds specialize in a particular country or region. For example, many distributors offer "Asia" funds, "Europe" funds, "Japan" funds and "U.S." funds.

Global funds can be bond funds, equity funds or virtually any of the fund types discussed in this chapter. The most common type of global mutual fund is, however, the **global equity fund**.

INVESTMENT OBJECTIVES OF GLOBAL MUTUAL FUNDS

The investment objectives of global mutual funds depend first on the class of security they are designed to hold in their portfolios. For example, the primary objective of a global equity fund is to earn capital gains over the long term. The objective of an international bond fund, on the other hand, will be to earn interest income with some capital gains over a somewhat shorter horizon.

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Investment objectives of a global mutual fund do not explain why investors may be attracted to a global mutual fund rather than a domestic equivalent. Investors are attracted to global mutual funds for two main reasons. The first is that at any one time, different countries are at different stages of an economic cycle.

EXAMPLE

It may be the case that the Canadian equity market is in a slump when the equity markets of other countries are performing well. Clients then can benefit from the higher returns available in non-Canadian markets. What this really means is that clients can benefit from additional diversification. Also, the Canadian securities market is relatively small, comprising only around 3% of the world's market capitalization. Investing exclusively in a Canadian basket could leave a client unduly exposed to geographic concentration risk.

Another reason global mutual funds are attractive is that they can provide a hedge against a decline in the relative value of the Canadian dollar.

EXAMPLE

If investors buy a Japan fund, and then the value of the Canadian dollar falls relative to the yen, the Canadian dollar value of that investment will increase whether the value of the fund's units in yen has remained unchanged.

A global mutual fund subjects the client to at least two types of risk: **market risk** of the country (or countries) in which the fund invests; and **foreign exchange risk**, because the value of the Canadian dollar can rise or fall in relation to the currency of another country.

Not all global mutual funds expose clients to foreign exchange risk, however. Portfolio managers can undertake hedging transactions in the foreign exchange market to remove or greatly reduce the foreign exchange risk of their fund. They can do this by selling foreign currency for future settlement, either through currency futures contracts or another similar type of contract called a **currency forward contract**.

EXAMPLE

Assume that a portfolio manager sells yen for delivery in six months at today's exchange rate. If the value of the yen rises relative to the Canadian dollar, the fund will make a profit on the contract. If the value of the yen falls, the fund will take a loss. What the manager is doing through the currency forward market is fixing the price at which the mutual fund company will convert the yen it eventually receives into dollars.

A global mutual fund's prospectus will indicate if the fund hedges the foreign currency risk by using these currency derivatives. It is important for mutual fund sales representatives to know whether their global mutual funds hedge foreign exchange risk, because some clients will want to bear that risk themselves, while others will not.

In addition to the market and foreign exchange risk, there are other risk factors for global mutual funds. First, accounting practices differ from country to country to a certain extent. While some countries follow practices similar to those used in Canada, others do not. Portfolio managers need reliable accounting data to assess the risks and potential profitability of companies. If the accounting data are not reliable or comparable, then investment results can suffer. Likewise, the level of compliance and the regulatory environment differ widely from country to country, especially in the emerging markets of Asia and Eastern Europe.

The second additional risk factor for global mutual funds has to do with the liquidity and efficiency of foreign stock markets. Canadian markets are liquid for most stocks, and the prices at which stocks trade generally reflect the information investors have about them. This is the idea of market efficiency. Foreign stock markets (and bond markets for that matter) might not offer as much liquidity as Canadian markets, and stock prices might not reflect information as rapidly. For established markets, such as the U.S., these problems do not exist. For much smaller stock markets, however, such as those in developing countries, inefficient stock markets can make it difficult for portfolio managers to make changes to their portfolios.

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RETURNS ON GLOBAL EQUITY FUNDS

Global equity funds are the most common type of global mutual funds. This section compares the performance of global equity funds to Canadian equity funds during a hypothetical 15-year period. In Figure 12.6, the average performance of Canadian equity funds is similar to the performance of the S&P/TSX Composite Index.

Figure 12.6 | Simple Annual Returns: Global Equity Funds

Source: Bloomberg

Figure 12.6 illustrates that the average performance of global equity funds can diverge significantly from Canadian equity funds. For instance, in Year 1 Canadian equity funds posted returns of 26.4%, while global equity funds lagged behind at 14.8%. In Year 3 the tables were turned: Canadian equity funds fell by 2.7%, while global equity funds rose by 17%. During this 15-year period, both experienced two major downturns: one in Year 7, where the Canadian equity fund fell by 13.2%, while the global equity fund lost 19.7%, and in Year 13, where the Canadian equity funds lost between 34.6% and the global equity fund lost 31.4%. The average annual performance of global equity funds has been lower over the 15-year period (2.84%) compared to Canadian equity funds (6.17%).

Global equity funds earn two types of return: dividends and capital gains. Capital gains are probably more significant. Dividends from global funds do not come from Canadian corporations and therefore are not eligible for the dividend tax credit. As a result, foreign-source dividends are taxed at the same rate as interest income.

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HYPOTHETICAL EXAMPLES OF GLOBAL FUNDS

The following examples compare two different types of global mutual funds—government bond funds and emerging market funds—in terms of their investment objectives, portfolios, investment strategies, and risks and returns.

CRYSTAL GLOBAL GOVERNMENT BOND FUND

The investment objective of the Crystal Global Government Bond Fund is:

> *"…to seek, over the long term, as high a level of total return as is consistent with investments in debt instruments issued or guaranteed by governments and other governmental agencies.*
>
> *The Fund seeks to achieve its investment objective by investing in bonds, debentures and other evidences of indebtedness issued or guaranteed by governments, semi-governmental entities, governmental agencies, supranational entities (such as International Bank for Reconstruction and Development), and other governmental entities in a variety of countries and denominated in the currencies of such countries. The Fund will be managed so as to be prudently diversified at all times among different regions, countries and securities. Under certain market conditions, short-term securities may be held within the portfolio."*

This is exactly the kind of investment objective to expect from a global bond mutual fund invested in government securities. Portions of the Investment Portfolio shown below and presented in Figure 12.7 reveal that the diversification of the fund extends to nine countries (including Canada).

Belgium	$3,296,264	(2.8%)
Canada	$14,195,190	(12.1%)
Finland	$3,366,934	(2.9%)
France	$10,229,732	(8.7%)
Germany	$20,693,569	(17.6%)
Italy	$8,484,775	(7.2%)
Netherlands	$3,129,604	(2.7%)
United Kingdom	$8,751,246	(7.4%)
USA	$36,704,681	(31.2%)
Supranational	**$8,653,625**	(7.4%)
Total	**$117,505,620**	

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Figure 12.7 | Diversification in a Global Government Bond Portfolio

It is not immediately apparent whether this Fund hedges the value of the Canadian dollar. The following statement appears at the end of the section on "Derivatives" in the prospectus:

> *"The Crystal Global Government Bond Fund will be permitted to invest in forward currency and currency futures contracts for the purpose of protecting itself from exchange rate fluctuations to the extent determined by the portfolio advisor. Such forward and futures contracts shall not exceed three years in duration and shall be limited to the market value of the foreign securities owned by the Fund and quoted in that currency. Adjustments shall be made to such forward and futures contracts owned by the Fund to ensure that these contracts are limited as above, which adjustment shall be made at least weekly and more frequently if necessary having regarded market conditions…."*

As discussed earlier in this chapter, some global mutual funds hedge foreign exchange risk. If clients invest in a global mutual fund to diversify beyond Canadian dollars, they may not want to buy units of a fund that hedges its exposure. Instead, they may want to invest in a fund that does not reduce the foreign exchange exposure through hedging.

CRYSTAL EMERGING MARKETS FUND

The investment objective of the Crystal Emerging Markets Fund is:

> *"… to achieve long-term capital appreciation through investment, primarily in equity securities. Under normal conditions, at least 65% of the Fund's total assets will be invested in emerging country equity securities, which for this purpose means common and preferred stock (including convertible preferred stock), bonds, notes and debentures convertible into common or preferred stock, stock purchase warrants and rights, equity interests in trusts or partnerships and American, global or other types of depository receipts. As used herein, an "emerging country" is any country that the World Bank has determined to have a low- or middle-income economy.*
>
> *The Fund seeks to achieve its investment objective by investing primarily in (1) equity securities in companies whose principal trading market is in an emerging country, (2) equity securities, traded in any market, of companies that derive significant annual revenue from either goods produced, sales made or services rendered in emerging countries, or (3) equity securities of companies organized under the laws of, and with a principal office in, an emerging country. The Fund will be managed so as to be prudently diversified at all times among different regions, countries and securities. Under certain market conditions short term securities may be held within the portfolio."*

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This statement of investment objectives sets out clearly what the portfolio manager may invest in. The Statement of Investment Portfolio (not shown) indicates that the Fund has equity investments in 26 countries and bond investments in two countries. This Fund does not hedge the value of the Canadian dollar.

WHAT ARE SPECIALTY MUTUAL FUNDS?

Specialty mutual funds are funds that restrict the investment objectives in some particular way. Of course, in a sense, all mutual funds are specialized. However, specialty mutual funds tend to concentrate investments in securities or industries to a far greater degree than other funds. Examples of specialty mutual funds are **precious metals funds** and **natural resource funds**. Each type of specialty mutual fund can be thought of as comprising its own mutual fund category.

RISK FACTORS OF SPECIALTY MUTUAL FUNDS

Specialty mutual funds have risk factors consistent with the make-up of their investment portfolios, just like the other types of funds. For example, gold funds rise and fall with the value of gold and securities based on the price of gold. However, many specialty mutual funds have an additional risk factor that other funds generally avoid: a lack of diversification.

Because of their specialization, specialty mutual funds tend to construct portfolios that are not as well diversified by industry sector as more standard types of funds. For example, a real estate mutual fund is exposed to the risk of the real estate market alone, and a resource mutual fund tends to invest only in firms in the natural resource sector of the economy. In comparison to traditional Canadian equity funds, for example, the lack of diversification in specialty funds can be striking.

To what extent is this lack of diversification a problem for clients? The answer to this question depends to a great extent on how the particular specialty mutual fund fits in with the client's current portfolio. If a less-than-well-diversified specialty mutual fund is a client's only investment, there could be a problem.

Your clients get the most diversification benefit by holding securities that have a low degree of correlation. That is, they get a reduction in total risk from holding a portfolio of two uncorrelated stocks, but no risk reduction if the stocks are perfectly (positively) correlated.

The same logic works for portfolios as for individual securities.

EXAMPLE

Imagine you have a client with a portfolio consisting of an equity fund and a bond fund. The client may be able to get more risk reduction without sacrificing return by adding another mutual fund that is not well correlated with the returns of the existing portfolio. That additional mutual fund might be a specialty fund, such as natural resource fund, or a real estate fund. In itself, the specialty fund is poorly diversified, but put together with the existing portfolio, the client can have still more diversification.

The key thing to remember is that no investment should be considered in isolation from the client's existing portfolio. It is not a good investment strategy for clients to buy a specialty mutual fund as their only investment, as they may be exposing themselves to more risk than necessary to earn the same expected return.

HYPOTHETICAL EXAMPLES OF SPECIALTY FUNDS

The following examples compare three different types of specialty mutual funds—a resource fund, a precious metals fund, and a special growth fund—in terms of their investment objectives, investments, and risks.

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CRYSTAL RESOURCE FUND

The investment objective of the Crystal Resource Fund is:

> *"…to provide capital growth by investing primarily in stocks of Canadian natural resource companies. This Fund invests in the stocks of companies primarily engaged in the precious metals, base metals, oil and gas, and forest products sectors, which have high growth potential. The Fund may invest in small cap companies and purchase and sell commodities such as precious and other metals and minerals."*

The prospectus has the following to say about risks:

> *"Because it invests in only a few sectors of the economy, the value of the Fund may vary more than funds that invest in many different industries. Its value is also affected by movements in commodity prices and changes in global economic conditions. Because it may invest in smaller companies, the value of the Fund may vary more than funds that invest only in larger, established corporations."*

As is the case with many specialty mutual funds, the goal is to earn capital gains. It is notable that this specialty mutual fund invests in the types of firms, industries and securities that other types of specialty mutual funds invest in. The prospectus states, for example, that this Fund may buy securities of small capitalization firms. Specialty small cap mutual funds do exist, and there are also mutual funds that specialize in only one commodity (e.g., gold). In a sense, the Crystal Resource Fund is more diversified than some other specialty mutual funds.

The $35,289,000 Investment Portfolio, presented in Figure 12.8, indicates the following partial breakdown by investment area:

- oil and gas, $7,991,000 (22.6%);
- gold and precious metals, $14,169,000 (40.2%);
- paper and forest products, $2,104,000 (6.0%);
- industrial products, $1,430,000 (4.1%);
- metal and minerals, $6,904,000 (19.6%); and
- money market securities $2,691,000 (7.6%). These securities are held for liquidity purposes: either to meet redemption demand or to take advantage of perceived market opportunities.

Figure 12.8 | Diversification in a Resource Fund

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CRYSTAL PRECIOUS METALS FUND

According to the investment objectives of the Crystal Precious Metals Fund:

> *"This Fund seeks to provide long-term capital growth by investing primarily in precious metals (gold, silver and platinum) in the form of bullion, coins, receipts and certificates, and in common shares and other securities of Canadian and foreign companies involved directly or indirectly in the exploration, mining and production of these metals. The Fund will not purchase silver and platinum in excess of 20 percent of its net asset value. The Fund may from time to time have a large portion of its assets in cash or cash equivalents in response to changing market conditions.*
>
> *Because the Fund invests in a specialized sector, it is particularly sensitive to changes in that sector. The price of gold and other precious metals can swing dramatically because of international monetary policy, political events and speculation. In addition, the price of gold may be affected by political conditions in South Africa, which remains the world's largest producer. Changes in the sector will affect the value of the precious metals held by the Fund, as well as the value of the companies in which the Fund has invested. The price of precious metals is quoted in U.S. dollars, so the unit value of the Fund will be affected by changes in the value of the U.S. dollar relative to the Canadian dollar."*

This Fund is more specialized than the resource fund described above, since it invests only in the precious metals sector.

According to its Annual Report, 58% of the Fund's assets, shown in Figure 12.9, consist of the common shares of Canadian firms engaged in gold and precious metals mining activities ($118,040,000). The Fund also holds gold and silver certificates worth $43,661,000 (21%) and shares of foreign metal and mining firms worth $35,399,000 (17%).

Figure 12.9 | Assets of a Precious Metals Fund

CRYSTAL SPECIAL GROWTH FUND

The simplified prospectus for the Crystal Special Growth Fund describes the objectives, investment policy and additional risk factors as follows:

Objective	The objective of this Fund is to generate long-term capital appreciation by directing investments into areas of emerging trends and values.
Investment Strategy	To achieve this objective, the Fund invests primarily in smaller companies. The emphasis is on analyzing and picking individual stocks rather than industry sectors.

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Risks	The Fund invests in smaller companies, generally lower than $500 million in market capitalization. The securities of smaller companies are often less liquid, less marketable and more volatile than those of larger companies.

It is possible to think of this Fund as simply an equity mutual fund, except that it specializes in small capitalization (or small cap) firms. These are typically firms making and marketing new types of products for which market demand may be difficult to determine. In addition, many small-cap firms can be bought only on the OTC market and may trade infrequently. This makes the market for shares of these firms less efficient.

In the Investment Portfolio, shown below in summary form and presented in Figure 12.10, Canadian equities account for 84.5% of the special growth fund portfolio.

Canadian equities		
Industrial products	$44,321,217	(24.4%)
Consumer products	$28,538,870	(15.7%)
Communications & media	$25,576,540	(14.1%)
Oil and gas	$21,316,424	(11.7%)
Gold and precious metals	$9,468,408	(5.2%)
Other industries	$24,382,502	(13.4%)
Total	$153,603,961	(84.5%)
Foreign equities	$16,556,495	(9.1%)

Note that cash and short-term investments make up the balance (6.4%) of the portfolio.

Figure 12.10

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FUND WRAPS

A **fund wrap** program provides a series of portfolios with multiple mutual funds to reflect pre-selected asset allocation models. Each model is designed to meet the needs of a group of investors sharing a similar client profile. In contrast to a balanced mutual fund, a fund wrap generally outsources the management and security selection within each asset category to different managers. Responsibility for the asset allocation decision falls to the wrap sponsor. For convenience, all administrative, management and trading costs are usually rolled into one wrap fee.

Fund wrap investors hold the unitized value of the fund of funds, but they do not hold title to the underlying funds or to the funds' underlying securities. Fund wraps are available with advisor compensation either built in or excluded (fee-based approach), increasing the flexibility and acceptability of these products.

From a trading point of view, there is no substantial difference between fund wraps and traditional mutual funds. From the client's point of view, the purchase, redemption and reporting process is the same as for mutual funds. From the mutual fund salesperson's point of view, the process also is largely the same, with differences only in details of compensation.

From a regulatory point of view, fund wraps constitute a specific investment structure. A fund of funds exists as a legal entity, in addition to the legal existence of the underlying mutual funds. Thus, specific regulatory provisions govern the development and promotion of fund wraps. Regulations include, for example, prohibitions against "double dipping" (charging fees twice for the same services or components). Otherwise, trading fund wraps as units is essentially the same as trading fund units.

Fund wraps can be funds of funds or portfolio allocation services. With a **fund of funds**, the client owns units of a pool of mutual funds, while in a **portfolio allocation service**, the client owns units of several mutual funds in the proportions established through the allocation service. Thus, in a portfolio allocation service, the investor actually owns units of the constituent mutual funds rather than units of a fund holding other funds.

RISKIER MUTUAL FUNDS

How do equity, balanced, and specialty funds compare? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you will be able to:

1. Describe and compare and contrast the composition of different equity mutual funds.
   - Equity mutual funds invest in the common and preferred shares of publicly-traded companies.
   - Equity mutual funds as a group have the goal of earning capital gains, sometimes with a current dividend income component.
   - Canadian equity mutual funds can be categorized into three fairly distinct types: "standard" equity funds, equity growth funds and equity index funds.
   - ESG issues are some of the most important drivers of change in the world today. ESG considerations include climate change, water scarcity, Indigenous and community relations, and diversity and inclusion.
2. List and describe the investment objectives, comparative returns and the volatility of the different types of equity mutual funds.
   - Equity growth funds pursue capital gains. Some dividend income may be earned, but probably not much.
   - An equity index fund has the goal of generating capital gains. It intends to do this by constructing an investment portfolio designed to mimic a particular stock market index.
   - Balanced mutual funds have the objective of earning current income and capital gains while at the same time preserving capital.
   - A new type of balanced fund has emerged in recent years: target-date funds. These funds have a maturity date and the risk of the fund decreases as the maturity date approaches.
   - The primary objective of a global equity fund is to earn capital gains over the long term.
   - The investment objectives of specialty mutual funds is to concentrate investments in securities or industries to a far greater degree than other funds to achieve better returns than diversified investments.
   - The average return performance of equity funds parallels that of the TSX Index, and equity and growth funds are much more volatile than the returns on money market funds.
   - Since balanced mutual fund are composed of both bonds and equities, their returns generally fall somewhere between bond fund returns and equity fund returns.
3. Describe the features and key types of specialty mutual funds.
   - Specialty mutual funds tend to concentrate investments in specific securities or industries.
   - Specialty mutual funds are generally not well diversified and are exposed to the risk inherent to the industry or sector.
   - A fund wrap program provides a series of portfolios with multiple mutual funds to reflect pre-selected asset allocation models.
   - In contrast to a balanced mutual fund, a fund wrap generally outsources the management and security selection within each asset category to different managers.
   - From a trading point of view, there is no substantial difference between fund wraps and traditional mutual funds.
   - Fund wraps can be funds of funds or portfolio allocation services.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 12 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 12 FAQs.

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Alternative Managed Products 13

CONTENT AREAS

- **What Are Principal-Protected Notes?**
- **What Are Hedge Funds?**
- **What Are Closed-End Funds?**
- **What Are Exchange-Traded Funds?**
- **What Are Segregated Funds?**

LEARNING OBJECTIVES

1 | Identify and distinguish between the features, advantages, and risks of the various alternative managed products discussed.

2 | Identify and describe the costs associated with these alternative managed products.

3 | List and compare the requirements to consider before investing in each product.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

accredited investor

alternative managed products

alternative mutual fund

annuitant

beneficiary

closed-end discretionary fund

closed-end fund

contract holder

death benefits

directional strategies

event-driven strategies

exchange-traded funds

first-order risk

guaranteed minimum withdrawal benefit plan

hedge funds

high-water mark

hurdle rate

incentive fees

interval fund

market sentiment

maturity guarantee

minimum investment

offering memorandum

performance averaging formulas

performance participation cap

portfolio funds

principal-protected note

probate

relative value strategies

reset option

second-order risk

segregated fund

tracking error

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INTRODUCTION

Since the early 1990s, managed products have become popular investment vehicles for many investors, particularly those who consider direct investing in bonds or equities too complex or risky. These products are often appropriate for investors who have a limited amount of money to invest but want the benefits of diversification and professional investment management.

Managed products include more than just mutual funds—the one constant in the investment industry is change. Continual innovation in financial markets, products, and the wealth management industry in general has resulted in an overwhelming number and variety of alternative managed products, which makes the process of making investment decisions all the more challenging. With more choice, investors have more homework to do before investing, and mutual fund representatives compete against new products they are not licenced to sell.

Alternative managed products are professionally managed portfolios of basic asset classes and/or commodities and include segregated funds, hedge funds, alternative mutual funds, exchange-traded funds, closed-end funds and principal-protected notes (PPN).

What distinguishes alternative managed products from other groups of investment products, such as mutual funds, is their use of complex investment strategies, such as the use of derivatives, leveraging and principal guarantees. The risk/return profiles of alternative managed products when compared to conventional asset classes are skewed by the use of these investment strategies.

This chapter looks at the features, advantages, and costs of the most common classes of alternative managed products.

WHAT ARE PRINCIPAL-PROTECTED NOTES?

A **principal-protected note** (PPN) is a debt instrument. Like other debt instruments, a PPN has a maturity date upon which the issuer agrees to repay investors their principal. In addition to the principal, PPNs provide interest paid either at maturity or as regular payments linked to the positive performance of the underlying PPN asset. The underlying assets can be common stocks, indexes, mutual funds, exchange-traded funds, commodities or hedge funds.

In Canada, PPNs are issued only by the six major banks (the Big Six). The banks function in three main roles: guarantor, manufacturer, and distributor.

- As the issuers of PPNs, the banks guarantee the return of principal at maturity. The value of the guarantee is based wholly on the perceived creditworthiness of the issuer. In the event of default, PPN investors rank equally with all other investors in the bank's deposit notes.
- As manufacturers, they choose the underlying asset, the term to maturity, and any special features tied to interest payments. This role is almost always performed by a group that specializes in equity derivatives, which is typically part of the bank's Capital Markets division.
- Banks distribute PPNs primarily through their investment dealer arm, although some banks use a third-party investment dealer or mutual fund dealer.

COSTS OF PRINCIPAL-PROTECTED NOTES

Many costs are associated with PPNs. These products are not mutual funds; as a result, they are not held to the transparency standards of mutual funds or prospectus-based financial products. In fact, the lack of transparency in these products prevents investors from clearly understanding all of the costs involved. It is particularly important, then, to determine their suitability before investing in PPNs.

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PPNs are not protected by the Canada Deposit Insurance Corporation (CDIC); they are considered uninsured deposit notes. PPNs are not issued under a prospectus because they are not considered securities. In most provinces, those who sell PPNs require no special licensing.

There are implicit as well as explicit costs to consider when purchasing a PPN. Explicit costs are described in the offering documents and include the costs identified in Table 13.1.

Table 13.1 | Common Explicit Costs Attached to PPNs

Commissions	PPNs have been designed in many ways to resemble mutual funds. PPNs differ from mutual funds in that investors bear the cost of the commission at the time of purchase because the net asset value (NAV) of the PPN declines directly as a result of commissions paid.
Management fees	Like mutual funds, many PPNs carry a management fee for actively managing the PPN's assets. Some PPNs, however, are issued without management fees. When a management fee is charged, it is charged to the assets of the PPN. Management fees affect the PPN's performance, which in turn affects the final payoff received by investors.
Early redemption fees	Many PPNs carry an early redemption fee. A typical early redemption fee schedule runs from two to five years and declines over time. The purpose of the early redemption fee is to ensure that the PPN's issuer receives the full fees it was expecting.
Structuring costs and guarantee fees	Some PPNs include an explicit charge for structuring, and most PPNs charge a fee for providing the capital guarantee.

Implicit Costs include fees borne by investors that may or may not be immediately visible and that may or may not be openly disclosed in the documents. Table 13.2 identifies the more common implicit costs.

Table 13.2 | Common Implicit Costs Attached to PPNs

Performance Averaging Formulas	Many mutual fund-based and income-producing PPNs use **performance averaging formulas** in which the PPN's final payoff is based not on the value of the underlying asset at maturity, but on some average performance of the underlying asset over the life of the note. This average performance typically is based on the note's monthly average NAV and may raise or lower the return to investors.
Performance Participation Caps	A PPN with a **performance participation cap** promises to pay the return earned by some particular asset up to a maximum amount. ***Example:*** An index-linked GIC might pay 60% of the return of the S&P/TSX 60 Index while guaranteeing investment principal. If the performance of the underlying asset exceeds the cap, investors would incur an opportunity cost because they could have earned a higher return on the investment if the cap did not exist.
Price Returns vs. Total Returns	The final payoff is based on the underlying asset's price return rather than its total return. Total return refers to the change in price plus any income such as dividends or interest. Using price return rather than total return is a hidden cost because it underestimates the actual performance of the underlying asset.

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ADVANTAGES AND RISKS OF PRINCIPAL-PROTECTED NOTES

Individual investors with relatively small amounts to invest can use PPNs to invest in markets they normally could not access. A PPN could use as its underlying asset a basket of selected commodities or a hedge fund. In this case, a PPN investor would not be subject to large investment minimums, accreditation requirements or margin calls that would normally be associated with direct commodity or hedge fund investments.

In addition, a PPN can enhance the return available from cash or cash-equivalents such as GICs or T-bills. Today, with relatively low real interest rates (the nominal interest rate minus the expected rate of inflation) on most traditional cash equivalents, a PPN can produce a higher yield while still protecting the principal invested.

Finally, PPNs may also be appropriate for the extremely risk-averse investor who has the ability but not the willingness to take equity-like risk. As long as the investor is convinced that the issuer's guarantee is secure, investing in a PPN can provide the investor with exposure to equities, commodities and more without the risk of investing in them directly.

While a PPN is free from risk of principal loss, it is not considered to be an entirely risk-free investment. Risks associated with PPNs include liquidity risk, performance risk, credit risk, and currency risk, described in Table 13.3.

Table 13.3 | Risks Associated with PPNs

Liquidity Risk	Most PPNs offer liquidity. They usually can be resold to the issuer before maturity, at certain dates, with associated costs and advance notice. However, the issuer is under no obligation to buy back the notes. Investors should buy PPNs with the intention of holding them until maturity.
Performance Risk	The performance of a PPN may not exactly track the performance of the underlying asset. It can either underperform or outperform it. The mismatch in performance is likely in the early years of the PPN issue. Investors are not just purchasing an underlying asset's returns with a principal protection feature tacked on, because many factors are involved in pricing a PPN, including interest rates, fees, the actual performance of the underlying asset, whether leverage has been used, and various explicit and implicit fees.
Credit Risk	The issuer may not be able to return the principal at maturity. Although the likelihood is small, especially because the issuers are large, well-known banks, the risk is still there.
Currency Risk	Because many PPNs track the returns from a foreign underlying asset that may be denominated in a foreign currency, investors may be exposed to currency risk. A change in the value of the foreign currency relative to the Canadian dollar will reduce the returns when reconverted to Canadian dollars.

BEFORE INVESTING IN PRINCIPAL-PROTECTED NOTES

PPNs are in some ways more difficult to evaluate than conventional investments. PPN issuers are not obligated to disclose as much information as they would if shares or a bond were brought to market. Still, the following points should be considered when evaluating a PPN:

- The creditworthiness of the issuer should be without question. The issuer is the only party investors can turn to for payment of principal and return.
- Investors should understand the calculation method used to arrive at the final variable return.
- Investors should understand the risk factors behind the underlying asset, whether it is a mutual fund, hedge fund or common stock.

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- The principal protection should be worth paying for. This is especially important for longer term equity-based PPNs (over five years), where the maturity horizon lowers the risk of loss. The principal protection might be worth the cost for an underlying basket of commodities but may not be worth the cost for an underlying mutual fund that has never lost money over the corresponding term of the PPN.

Case Study | Paul Balances Risk and Reward (*for information purposes only*)

Sandra is a mutual fund representative who works for the mutual fund arm of ABC Bank. She is meeting with her client Paul. Having suffered heavy investment losses during the most recent financial crisis, Paul moved most of his investment portfolio into GICs and has been wary of re-investing since then. However, Paul has since seen equity markets rebound sharply over the last few years and knows that he requires growth in his portfolio to reach his retirement goals. Given how low present GIC rates are, Paul wants to discuss with Sandra investment opportunities that will allow him to benefit from the performance of equity markets without putting his principal at risk.

Sandra explains to Paul that mutual funds are not guaranteed as to their principal or return and that with the exception of money market funds, there is potential risk of negative returns in even the most conservative funds. However, Sandra suggests that if Paul wants to participate in the equity markets without placing his principal at risk, there is the option of principal-protected notes. Sandra explains to Paul that PPNs provide investors with a principal guarantee on their original investment. The investor's return consists of a percentage of the market index's return over a pre-set timeframe.

Sandra suggests to Paul that the 3-year ABC Bank Canadian Equity Growth PPN would be an ideal fit. The PPN's three-year term allows Paul to learn about how this solution can work to help him reach his goals while not locking him into a longer term. ABC Bank is a top Canadian chartered bank, so there is essentially zero issuer credit risk. Paul's principal is guaranteed. The return of the PPN is linked to the S&P/TSX Composite Index's return over the three-year period, so Paul will participate in the upside of the market's performance while avoiding any downside.

However, Sandra explains that the cost of the guarantee is that Paul will receive only 50% of the Index's return at the conclusion of the three-year term and that if the return is negative, he will receive his principal back, but a nil return on his investment. Paul is willing to accept this cost given his desire to find the right balance between risk and reward that properly fits his needs.

WHAT ARE HEDGE FUNDS?

Hedge funds are lightly regulated pools of capital whose managers have great flexibility in their investment strategies. Hedge fund strategies are often referred to as alternative investment strategies. Hedge fund managers are not constrained by the rules that apply to mutual funds. The managers can take short positions, use derivatives for leverage and speculation, perform arbitrage transactions, and invest in almost any situation in any market where they see an opportunity to achieve positive returns.

In addition to alternative strategies, the category of alternative investments includes alternative assets and private equity. These investments include, but are not limited to, real estate, commodities, and investments in securities that are not publicly listed (i.e., private equity).

Despite the hedge fund name, some funds do not hedge their positions at all. It is best to think of a hedge fund as a type of fund structure, rather than a particular investment strategy.

Another type of fund structure that utilizes alternative strategies is the **alternative mutual fund**, otherwise known as liquid alternatives or simply as liquid alts. This type of fund was recently introduced into Canada, replacing what were known as commodity pools. By regulation, alternative mutual funds are allowed greater use of short sales, leverage, and derivatives compared to mutual funds, but not to the same extent as hedge funds. Unlike hedge funds, alternative mutual funds can be sold to retail investors. Hedge funds, in contrast, have a more limited audience.

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DID YOU KNOW?

Proficiency Standards to Sell Alternative Mutual Funds

CIRO Registered Representatives (RRs) are able to deal in alternative mutual funds within their existing licensing approval category, however as with all products the dealer and the RR need to ensure that Know Your Product requirements are met.

Mutual fund sales representatives are not allowed to distribute alternative mutual funds unless they possess one of the following:

- Passing grade for the Canadian Securities Course;
- Passing grade for the Derivatives Fundamentals Course;
- Successful completion of the Chartered Financial Analyst Program; or
- Any applicable proficiency standard mandated by a self-regulatory agency

This proficiency requirement was the one aspect of the CSA regulation that governed commodity pools (NI 81-104) that has been retained at least for the time being. The CSA is evaluating proficiency requirements more generally and it is possible the requirements to deal in alternative mutual funds may change in the future along with other proficiency alterations.

Because hedge fund managers have tremendous flexibility in the types of strategies they can employ, the manager's skill is more important than for other alternative managed products. Additionally, a hedge fund's investment objectives and investor suitability vary depending on the manager's choice of strategy and the targeted risk/return level.

Like mutual funds, alternative mutual funds and hedge funds:

- Are pooled investments that may have front-end sales commissions.
- Charge management fees.
- Can be bought and sold through an investment dealer.

Despite these similarities, there are differences to consider, summarized in Table 13.4.

Table 13.4 | Comparing Mutual Funds to Alternative Mutual Funds and Hedge Funds

Main Product Features and Regulatory Restrictions	Conventional Mutual Funds	Alternative Mutual Funds	Hedge Funds
Investment objective	Maximize relative return	Maximize absolute return, while providing downside protection in falling markets	Maximize absolute return, while providing downside protection in falling markets
Permitted short sale of a single issuer	Maximum of 5% of fund NAV	Maximum of 10% of fund NAV	Permitted as per offering memorandum
Permitted total short sales for fund	Maximum of 20% of fund NAV	Maximum of 50% of fund NAV	Permitted as per offering memorandum

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Table 13.4 | Comparing Mutual Funds to Alternative Mutual Funds and Hedge Funds

Main Product Features and Regulatory Restrictions	Conventional Mutual Funds	Alternative Mutual Funds	Hedge Funds
Diversification – concentration (issuer level)	Maximum of 10% of NAV invested in securities of any one issuer	Maximum of 20% of NAV invested in securities of any one issuer	Limit set by offering memorandum
Fund NAV calculation frequency	Required to calculate NAV weekly, unless they use specified derivatives or short sell – in which case the NAV must be calculated daily	Same as conventional mutual fund	Frequency set by offering memorandum (usually monthly or quarterly)
Charging management fees permitted	Yes	Yes	As defined in offering memorandum
Charging performance fees permitted	Yes, but can only charge performance fees tied to a reference benchmark or index	Yes, but performance fees normally charged based on the total return of the fund itself	Yes, but performance fees normally charged based on the total return of the fund itself
Product redemption	Usually daily	Usually daily	Usually monthly, sometimes quarterly
Permitted investors	General public	General public	Exempt, accredited, institutional, or minimum initial $150,000 investment
Fund holdings disclosure (transparency)	Monthly: Top ten security holdings Quarterly: Complete fund holdings report	Monthly: Top ten security holdings Quarterly: Complete fund holdings report	Disclosure frequency stipulated in offering memorandum (typically semi-annual or annual)
Investor rights of withdrawal	Right to cancel investment within 48 hours of receipt of confirmation purchase	Right to cancel investment within 48 hours of receipt of confirmation purchase	No right of withdrawal

INVESTING IN HEDGE FUNDS

Hedge funds are typically sold to investors without a prospectus. Securities regulators permit the sale of securities without a prospectus, but only under certain conditions and only to investors who meet exempt investor qualifications. The exempt market is composed of both institutional investors and individual investors.

Common prospectus exemptions allowed by securities regulators include the accredited investor exemption, the minimum investment exemption, and the offering memorandum exemption. Typically, individual hedge fund investors must qualify as accredited investors.

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Accredited investor exemption	An **accredited investor** is described in National Instrument 45-106 as follows: • An individual who, either alone or with a spouse, beneficially owns financial assets with an aggregate realizable value (before taxes, but net of related liabilities) that exceeds $1 million. • An individual whose net income before taxes exceeded $200,000 (or exceeded $300,000 if combined with a spouse's income) in each of the two most recent years, and who has a reasonable expectation of exceeding that same income level in the current year. • An individual who, alone or with a spouse, has net assets (which would include real estate, and which is again net of any related liabilities) worth at least $5 million. Persons relying on the accredited investor exemption to distribute securities to such an investor must obtain a completed and signed risk acknowledgement form from that individual accredited investor. The accredited investor exemption includes other categories of entities and individuals, as described in National Instrument 45-106.
Minimum investment exemption	The **minimum investment** exemption is not available to retail investors. This exemption allows the sale of securities to non-individual investors who make a prescribed minimum investment. National Instrument 45-106 sets this minimum at $150,000 across all jurisdictions in Canada.
Offering memorandum exemption	The **offering memorandum** exemption allows an issuer to sell its securities based on an offering memorandum being made available to investors. An offering memorandum is a document that provides information on the business and affairs of the issuer, including audited financial statements. It also describes certain rights of the investor, including a two-business-day right of withdrawal and a right of action for damages (and rescission) if the offering memorandum contains a misrepresentation. This exemption is subject to investment limits (e.g., $10,000 for investors who do not meet certain income and asset thresholds) and requires that investors sign a risk acknowledgement form. Additional restrictions and requirements that apply may vary between provinces, so it is best to consult your jurisdiction to determine their nature.

The market for hedge funds can be grouped under the following two categories:

- Funds targeted toward high-net-worth and institutional investors
- Funds, and other hedge fund-related products, targeted toward the less affluent individual investor (i.e., the retail market)

Hedge funds targeted toward high-net-worth and institutional investors are usually structured as a limited partnership or trust, and are issued by way of private placement.

As mentioned, in the broader retail market, alternative mutual funds are now available as a way to gain access to alternative investment strategies. Other retail vehicles through which alternative strategies can be accessed are closed-end funds and exchange-traded funds (described later in the chapter).

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HEDGE FUND STRATEGIES

Hedge fund investment strategies span all asset classes, all regions of the world and all levels of market capitalization. Hedge funds nevertheless can be placed into three major categories based on the strategies they use—relative value, event-driven and directional. The three strategies are listed in order of increasing expected return and risk:

- **Relative value strategies** attempt to profit by exploiting inefficiencies or differences in the pricing of related stocks, bonds or derivatives in different markets. Hedge funds using these strategies usually have low or no exposure to the underlying market direction. Their returns are due to the manager's skill in identifying mispriced securities.
- **Event-driven strategies** seek to profit from unique events such as mergers, acquisitions, stock splits and stock buybacks. Hedge funds that use event-driven strategies have medium exposure to the underlying market direction.
- **Directional strategies** bet on anticipated movements in the market prices of equities, debt securities, foreign currencies and commodities. Hedge funds using these strategies have high exposure to trends in the underlying market. The manager focuses on predicting and understanding the opportunities generated by trends in different market indicators.

COSTS OF HEDGE FUNDS

In addition to management and administration fees, hedge fund managers often charge an incentive fee based on performance. **Incentive fees** are usually calculated after the deduction of management fees and expenses and not on the gross return earned by the manager. This detail can make a significant difference in the net return earned by investors.

Incentive fees may be calculated in relation to a high-water mark, a hurdle rate or both. A **high-water mark** ensures that a fund manager is paid an incentive fee only on net new profits. In essence, a high-water mark sets a bar (based on the fund's previous high value), above which the manager earns incentive fees. It prevents the manager from "double dipping" on incentive fees following periods of poor performance.

EXAMPLE

ABC Hedge Fund is launched with a net asset value of $10 per unit. At the end of the first year, the fund's net asset value rises to $12 per unit. For the first year, the manager is paid an incentive fee based on this 20% performance. At the end of the second year, the fund's net asset value has fallen to $11 per unit. The fund manager receives no incentive fee for the second year and will not be eligible to receive an incentive fee until the fund's net asset value rises above $12 per unit.

A **hurdle rate** is the rate that a hedge fund must earn before its manager receives an incentive fee. Hurdle rates are usually based on short-term interest rates to reflect the opportunity cost of holding risk-free assets such as T-bills.

EXAMPLE

ABC Hedge Fund has a hurdle rate of 5%, and the fund earns 20% for the year. The incentive fees will typically be based on the 15% return above the hurdle rate, subject to any high-water mark.

ADVANTAGES AND RISKS OF HEDGE FUNDS

There are many advantages of investing in hedge funds including the focus on absolute returns, lower correlation with traditional asset classes, and the potential for lower volatility and higher returns. Table 13.5 outlines these advantages.

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Table 13.5 | Advantages of Hedge Funds

Focus on Absolute, not Relative, Returns	Hedge fund managers seek to achieve positive or absolute returns in *any* market condition (up markets, down markets, trendless markets) not just returns that beat a market index, which is the goal of most mutual funds. A mutual fund manager might be satisfied with losing less than the benchmark, but a hedge fund manager in the same position would be disappointed with the results.
Lower Correlation with Traditional Asset Classes	Although correlations can change over time, hedge fund returns usually have a low correlation to the returns on traditional asset classes, such as equity and debt securities. If these low correlations are maintained over time, hedge funds can provide diversification benefits and help lower overall portfolio risk. The extent to which a hedge fund provides diversification benefits depends on the type of hedge fund and on market conditions.
Potential for Lower Volatility and Higher Returns	The different strategies and opportunity to use derivatives, and short sell securities give hedge funds a greater potential to earn higher returns relative to mutual funds. These characteristics also give hedge funds the opportunity to reduce overall market volatility.

On the other side, hedge funds are subject to several types of unique risk: lighter regulatory oversight, manager and market risk, liquidity constraints, and investment strategy risk. Table 13.6 outlines these risks.

Table 13.6 | Risks of Hedge Funds

Light Regulatory Oversight	Hedge funds are generally not required by securities laws to provide the comprehensive initial and ongoing information associated with securities offered through a prospectus. This lack of transparency may create a situation in which hedge fund investors may not always know how their money is being invested.
Market Risk	Hedge funds do not seek to produce returns "relative" to a particular index, but strive to generate positive returns regardless of market direction. This risk, also referred to as **first-order risk**, is the risk associated with the direction of interest rates, equities, currencies and commodities.
Liquidity Constraints	Unlike mutual funds, hedge funds are typically not able to liquidate their portfolios on short notice. Holding less-liquid investments often produces some of the excess returns generated by hedge funds. This liquidity premium is part of the trade-off against traditional investments. In light of this, there are often various forms of liquidity constraints imposed on hedge fund investors. This risk is also referred to as **second-order risk**, and is related to aspects of trading, such as dealing, implementing arbitrage structures, or pricing illiquid or infrequently valued securities.
Investment Strategy Risk	Even if hedge fund managers try to mitigate risk, the methods they use may be difficult to understand. As a result, there is a risk that investors may not fully understand the techniques being used. It is the responsibility of investors to understand the strategies and investment products used by the hedge fund manager, as well as the fund's risk profile.

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BEFORE INVESTING IN HEDGE FUNDS

As noted previously, hedge funds operate in a more relaxed regulatory environment than traditional investments and in a culture in which disclosure of management techniques, trades, and analytics is not required. Many hedge funds are small, have complex legal structures, and may rely on a single manager using complex strategies. To "Know the product" is thus an important part of the decision to invest in a hedge fund. Some of the key areas investors should focus on include:

Fund track record	Consider only those single-strategy hedge funds that have at least a two-year track record and $25 million under management.
Risk characteristics	Investor's risk profile should be consistent with the risk characteristics of the hedge fund. Identify different measures of the fund's risk and risk-adjusted return and compare them with the same measures for the fund's peers.
Hedge fund manager	Examine the experience and reputation of the hedge fund firm and manager. The fund manager should have many years of experience with the trading system under use. Focus on the individuals making the investment decisions rather than on the sales representatives trying to sell the fund.
Hedge fund features	Read the marketing material, the prospectus, offering memorandum, or information statement. Do not rely solely on sales presentations for information. Understand the fund's fee and expense structure, the potential use of leverage, and the liquidity terms.
Return statistics	Understand the nature of return statistics published in marketing materials. The results should encompass enough market cycles to prove the trading system to be reliable over time.
Tax treatment	Understand the tax implications of the fund. Some hedge funds are taxed annually while others are taxed only upon disposition. Some funds regularly distribute income while others distribute a combination of capital gains and income.
Currency risk	Know whether the fund is exposed to currency risk, whether the manager intends to hedge that risk, and whether the manager has expertise in hedging currency risk.

WHAT ARE CLOSED-END FUNDS?

A **closed-end fund** is a managed pool of securities traded on a stock exchange. The pool is similar to a mutual fund in that the closed-end fund invests in most of the same types of assets, such as stocks and bonds. However, unlike a conventional open-end mutual fund that continually issues and redeems units, a closed-end fund has a fixed number of shares. The number of shares or units in closed-end funds remains fixed, except in rare cases of an additional share offering, share dividend, or share buy-back.

Funds that have the flexibility to buy back their outstanding shares are periodically known as **interval funds** or **closed-end discretionary funds**. They are more popular in the United States.

Like mutual funds, closed-end funds pay management fees from the assets of the portfolio. Unlike mutual funds, closed-end funds generally have lower costs because of lower portfolio turnover and lower marketing costs. Buying a closed-end fund is similar to buying an individual stock, requiring no more than a brokerage commission. In contrast, buying a mutual fund could require payment of a front-end sales charge plus ongoing trailer fees. These fees can eat up a significant proportion of an investor's return.

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ADVANTAGES AND RISKS OF CLOSED-END FUNDS

Closed-end funds offer certain opportunities for investment returns not available to investors in regular mutual funds, such as short selling or leverage. Thus, closed-end funds can boost total return.

In working with a closed-end structure, money managers are not subject to unpredictable cash flow in and out of the fund. They have the flexibility to concentrate on long-term investment strategies without having to reserve liquid assets to cover redemptions, as they would be with regular open-end mutual funds. Open-end mutual funds must keep a certain percentage of their funds liquid, in case of redemptions. Typically, a closed-end fund is closer to being fully invested than an open-end fund.

Because the number of units of a closed-end fund is generally fixed, capital gains, dividends, and interest distributions are paid directly to investors rather than reinvested in additional units. Therefore, tracking the adjusted cost base of these funds may be easier than for open-end mutual funds. Moreover, because there are only a fixed number of units to be administered, investors in closed-end funds may benefit from lower management expense ratios (MERs) than open-end funds similar objectives.

Closed-end funds have risks relating mainly to trading, liquidity, and leverage. They do not necessarily trade at their net asset value. In an open-end fund, the fund NAV is the sum of the value of the constituent securities, but in a closed-end fund, there is often a discount to the NAV. This discount may become especially significant in volatile markets, negatively affecting investors who want to sell their shares. In bear markets, closed-end fund shareholders may suffer as the value of the underlying assets declines and as the gap between the discount and the net asset value widens.

Partly because of the divergence of trading prices from net asset value, closed-end funds are less liquid than open-end funds. With trading taking place on a stock exchange, buyers and sellers must be found in the open market—the fund itself does not usually issue or redeem units. Also remember that commissions are paid at the time of purchase and at the time of sale.

In addition to liquidity risk, there is leverage risk. A closed-end fund can use borrowed money in the management of the portfolio, which magnifies the gains and losses in the net asset value.

BEFORE INVESTING IN CLOSED-END FUNDS

One of the main requirements with the purchase of a closed-end fund is understanding the discount or premium at which the fund may trade. Market demand as well as the underlying asset value can create situations where the fund trades at a discount, at par or at a premium relative to the combined net asset value of their underlying holdings. For instance, an increase or decrease in the discount can indicate **market sentiment**, which is the general feeling or mood of investors to the anticipated price movement of the stock market. The greater the relative discount, all other things being equal, the more attractively priced the fund.

However, it is important to find out whether the discount at which a fund is trading is below historical norms. A widening discount could indicate underlying problems in the fund, such as disappointing results from an investment strategy, a change in managers, poor performance by the existing managers, increased management fees or expenses, or extraordinary costs such as a lawsuit.

WHAT ARE EXCHANGE-TRADED FUNDS?

Exchange-traded funds (ETFs) are baskets of securities that are constructed like mutual funds but traded like individual stocks on an exchange. ETFs are similar to index mutual funds in that they will hold the same stocks, bonds or other securities in the same proportion as those included in a specific market index.

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EXAMPLE

The iShares CDN S&P/TSX 60 Index Fund holds a basket of stocks that represents the S&P/TSX 60 Index and trades under the symbol XIU on the TSX. The S&P/TSX 60 Index consists of 60 of the largest and most liquid stocks traded on the Toronto Stock Exchange. The iShares CDN S&P/TSX 60 will hold the same 60 stocks as the S&P/TSX 60 Index.

An investment in an ETF combines attributes of both index mutual funds and individual stocks. Like an index mutual fund, an ETF represents a passive style of investing which attempts to match the performance of an index, such as the S&P/TSX 60 Index mentioned in the example above. Since ETF performance mirrors the index it tracks, if the index falls, so will the ETF.

Like stocks, and unlike index mutual funds, ETFs are traded on an exchange and can be bought and sold throughout the trading day. In this way, ETFs provide investors with a flexible way to participate in the performance of the underlying index.

In Canada, there has been significant growth in the number of ETFs and the companies that offer them. As of April 2021, there were a total of 824 ETFs listed on the Toronto Stock Exchange offered by more than 30 ETF companies.

ADVANTAGES AND RISKS OF EXCHANGE-TRADED FUNDS

Table 13.7 identifies the many advantages ETFs have over conventional investment vehicles.

Table 13.7 | Advantages of ETFs

Buy the Market	ETFs allow the investor to diversify and "buy the market" or a segment of the market in one transaction without having to purchase all the stocks individually.
Professional Management	As with mutual funds, the investor benefits from professional management.
Low Management Costs	MERs tend to be lower than on other index and actively managed products. Both index mutual funds and ETFs tend to have lower MERs than active mutual funds because the fund managers are not spending time or money researching companies in which to invest.
Lower Operational Costs	ETFs have lower operational costs in general, as they use stock exchanges' sponsored facilities to record ownership of units and daily transactions. Mutual funds must keep a back office running to keep such records.
Cash Drag	ETFs do not have the same cash drag that index mutual funds have. Mutual funds must keep a portion of their assets in cash or "liquid" to satisfy any redemption requests. ETFs do not have this requirement and can remain fully invested.
Tax Efficiency	ETFs are regarded as a tax-efficient investment. The relatively low trading turnover typically generates few capital gains that must be distributed to unitholders and taxed in their hands.

ETFs are subject to the same risks as individual stocks trading on an exchange, including:

- Market risk and sector risk if the ETF tracks a specific industry.
- Trading risk as there is no guarantee that the ETF will trade close to its net asset value or that there will be an active trading market for the ETF.

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- If the ETF tracks a foreign index, then the investor is also exposed to foreign security risk. Many foreign markets tend to be less liquid and less efficient than North American markets and may have more government intervention.
- Foreign currency risk because nominal returns in the investor's domestic currency will be reduced if the currency is strong against the foreign currency.
- Not all ETFs fully replicate the benchmark index. The degree to which an ETF fails to mirror the index returns is known as **tracking error**. It is costly to perfectly match the index, so managers take a representative sample that behaves close to the index. Some ETFs may not include all the securities, and some may include securities not in the index. Many ETFs have restrictions regarding the percentage holdings of any one security.
- Because ETFs are not subject to individual stock or sector exposure limits that are normally part of a mutual fund's investment objective they are subject to concentration risk. If particular sectors have had extraordinarily large gains, then it is possible for the ETF to be highly concentrated in a single stock (in excess of 10%) or sector (in excess of 40%).

COSTS OF EXCHANGE-TRADED FUNDS

Rather than paying a front-end load as is the case with some mutual funds, the cost to purchase an ETF is the commission charged by a broker or discount broker when both buying and selling the ETF units.

Fees that are indirectly charged to the investor include management fees, distribution fees and other operating expenses. As previously stated, these tend to be lower than for most other comparable mutual funds. International ETFs, especially those in emerging markets, tend to have higher fees than domestic ETFs.

The MERs on Canadian ETFs can range from as low as 0.17% to as high as 1.70%. International MERs range as high as 1.00%. MERs are typically substantially lower than for comparable equity or index mutual funds, or even bond mutual funds.

BEFORE INVESTING IN EXCHANGE-TRADED FUNDS

Aside from the fundamentals of the underlying ETF assets, the value of an ETF lies in its low management costs. But not all ETFs are created equally. The recent popularity of ETFs has spawned an explosion of new issues.

For instance, there are ETFs that track portfolios of alternative assets such as gold, oil, and international real estate. MERs for these specialty ETFs are normally higher than typical stock index ETFs. Investors looking to purchase a specific ETF should make sure costs are low and liquidity is high to justify the ETF label.

EXCHANGE-TRADED FUNDS

Can you compare exchange-traded funds to mutual funds? *Complete the online learning activity to assess your knowledge.*

WHAT ARE SEGREGATED FUNDS?

A **segregated fund** is actually an insurance contract with two parts: an investment that produces the return and an insurance policy that covers the risk. The segregated fund is like a mutual fund, with all the associated market risks and benefits of professional management. But a segregated fund comes with death benefits and a maturity guarantee attached that protects the investor's principal from market declines. The guarantee ensures that the investor will get back, at maturity or death, up to 100% of their investment, regardless of how markets perform or the market value, whichever is greater.

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Segregated funds, like mutual funds, can be bought or sold at any time. However, to qualify for the guarantee, investors must hold the fund for a minimum period, usually ten years. If the investor sells prior to the maturity date, they will receive the market value, which may be less than their original investment.

Because segregated funds are insurance contracts, they are regulated by provincial insurance regulators. This means you need to be a licensed insurance representative to sell them.

Essentially, a segregated fund contract covers the following three parties:

- The **contract holder**—the person who purchased the contract.
- The **annuitant**—the person on whose life the insurance benefits are based.
- The **beneficiary**—the person who will receive the benefits payable under the contract upon the death of the annuitant (a contract may have more than one beneficiary).

ADVANTAGES AND RISKS OF SEGREGATED FUNDS

Clear advantages of segregated funds include maturity guarantees, reset dates, death benefits, creditor protection and bypassing probate.

Maturity guarantees. One of the key features associated with segregated funds is the maturity guarantee, which is the promise that the contract holder or beneficiary will receive at least a partial guarantee of the return of the money invested. Provincial legislation requires that the guarantee be at least 75% over a contract term of at least a 10-year holding period. Some insurers have increased the minimum statutory 75% guarantee to 100%.

EXAMPLE

Leslie has invested in a segregated fund over the past ten years that includes a 100% maturity guarantee. Assume that the amount invested was $100,000. The market value of the fund at maturity is $95,000. Since the market value of the fund is less than the amount invested, Leslie is paid a $5,000 maturity guarantee.

Reset options. Although segregated fund contracts have at least a ten-year term, they may be renewable when the term expires, depending on the annuitant's age. If renewed, the maturity guarantee on a ten-year contract would "reset" for another ten years.

The reset option allows the contract holder to protect accrued values inside the fund.

EXAMPLE

If a $50,000 ten-year segregated fund has increased in value by $11,000, the investor can use the reset option to protect the full $61,000. But the reset option resets the 10-year clock on the fund's guarantee.

Many insurers issuing segregated funds have added greater flexibility in the form of more frequent reset dates. In some cases, holders of segregated fund contracts may lock in the accrued value before the original 10-year period has expired (and extend the maturity date by 10 years).

Death benefits. The death benefits associated with segregated funds meet the needs of investors who want exposure to long-term asset classes while ensuring that their investments are protected in the event of death.

The principle behind the death benefits is that the contract holder's beneficiary or estate will receive payouts amounting to at least the original guaranteed amount. The amount of the death benefit is equal to the difference, if any, between the net asset value of the fund and the guaranteed amount.

Table 13.8 illustrates the death benefits when the market value of the units held in the segregated fund is below, the same as, or higher than the guaranteed amount.

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Table 13.8 | Death Benefits

Guaranteed Amount	Market Value at Death	Death Benefit	Amount Paid to Beneficiaries
$10,000	$8,000	$2,000	$10,000
$10,000	$9,000	$1,000	$10,000
$10,000	$10,000	None	$10,000
$10,000	$11,000	None	$11,000

As the table shows, death benefits are paid only when the market value of the fund is below the guaranteed amount.

EXAMPLE

From the table above, when the market value at death is $9,000, the beneficiary will receive a death benefit payment of $1,000. Therefore, in addition to the payment of the $9,000 market value of the fund, the total payment to the beneficiary is $10,000. When the market value at death is above the guaranteed amount, there is no death benefit payable because the beneficiary receives the full market value of the investment which is higher than the guaranteed amount.

Creditor Protection. Another advantage is that segregated funds may offer protection from creditors that is not available through other managed investment products. Creditor protection is available because segregated funds are insurance policies. The insurance company rather than the contract holder owns the fund's assets and insurance proceeds fall outside the provisions of bankruptcy legislation.

EXAMPLE

Suppose that a self-employed professional died and left a non-registered investment portfolio of $300,000 and business-related debts of $150,000.

- If the portfolio were made up of mutual funds, then creditors would have a claim on half of the portfolio, leaving only $150,000 for the surviving family members.
- If the entire portfolio had been held in segregated funds, then $300,000 would be payable directly to the deceased person's beneficiaries.

Bypassing Probate. Investing in segregated funds can help investors avoid the costly probate fees levied on assets held in investment funds. **Probate** is the official process of verifying a will as genuine. Since segregated fund contracts are insurance policies, and not assets of the contract holder, they are not regarded as part of the deceased's estate. The proceeds of a segregated fund pass directly into the hands of the beneficiaries.

In addition, the proceeds of a segregated fund are payable immediately. There is no waiting for probate to be completed, and payment cannot be delayed by a dispute over the settlement of the estate. Moreover, by passing assets directly to beneficiaries through a segregated fund, contract holders can ensure that their beneficiaries save on fees paid to executors, lawyers and accountants.

COSTS OF SEGREGATED FUNDS

Like mutual funds, segregated funds incur fees related to switching, trailers, sales and management expenses. In addition, segregated funds have costs related to maturity guarantees and death benefits.

Investors should also recognize that there is a *cost* to investing in a managed product that offers such guarantees. For segregated funds, the cost is in the form of higher MERs compared to mutual funds that do not offer this guarantee.

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The shorter the term of the maturity guarantees, the higher the risk exposure of the insurer and the higher the cost of the guarantees. Also, segregated funds with a large equity component have a costlier guarantee than a similar segregated fund with a more balanced portfolio. These relationships are based on the premise that there is a greater chance of market decline (and hence a greater chance of collecting on a guarantee) over shorter periods and that the chance of loss increases with the portfolio's risk.

The cost of the segregated fund also varies with the level of principal protection the contract affords.

EXAMPLE

A fund with a 100% minimum benefit guarantee will be more expensive than a fund offering a 75% minimum benefit guarantee. Typically, a guarantee will add between 50 and 300 basis points (100 basis points = 1.00%) above the MER of a standard mutual fund. This ensures that a segregated fund will typically lag the performance of its conventional mutual fund counterpart.

BEFORE INVESTING IN SEGREGATED FUNDS

There are certain factors to consider in the selection of a segregated fund. Death benefits may have conditions that reduce payouts to the beneficiary. It is important to check the contract for details on exclusions and age limits. For example:

- Once the insured person reaches a threshold age, the beneficiary may be required to accept a reduced percentage of benefits.
- When deposits have been made over a period of time and benefits vary according to the client's age, the death benefit is calculated according to a formula that factors in the amount of deposits and the client's age when they were made. Benefits may be lower than expected.
- A client of a certain age might be excluded outright from buying a company's segregated funds. Some firms may require that the individual on whose life the death benefits are based be no older than 80 at the time the policy is issued.

SEGREGATED FUNDS

How well do you know the terms associated with segregated funds? *Complete the online learning activity to assess your knowledge.*

GUARANTEED MINIMUM WITHDRAWAL BENEFIT PLANS

When clients near their retirement, losses in their portfolio can be particularly serious. Earlier in the investment cycle, good years can balance off bad years, but in retirement the extra return from later good years can be lost, since part of the portfolio has to be withdrawn for income.

To counter the risk of retirement funds being impaired by a few bad years at the wrong time, insurance companies have developed **guaranteed minimum withdrawal benefit** (GMWB) **plans**. Industry experts predict there is the potential for tremendous demand for this product, particularly as the baby boomers approach retirement.

A GMWB is similar to a variable annuity.

With a variable annuity the amount of monthly payment to the annuitant varies according to the value of the investments in a segregated fund into which premiums are placed. Many variable contracts provide a "floor" below which benefits may not fall. The floor for benefits is usually equal to 75% of premiums paid, regardless of what happens to the value of the variable annuity fund.

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With a GMWB:

- The client purchases the plan, and the GMWB option gives the plan holder the right to withdraw a certain fixed percentage (7% is typical) of the initial deposit every year until the entire principal is returned, no matter how the fund performs.
- At a minimum, clients receive their principal. The underlying investment account can be based on a variety of indexes, funds, etc.

Under one plan, clients can buy the GMWB several years in advance of their withdrawals.

- In this case, the guaranteed amount can grow by 5% every year until withdrawals begin. Every three years, throughout the term of the plan, if the underlying fund has risen, the guaranteed amount is reset upwards. When the guaranteed amount increases, the payment period is extended, and the regular payments may also be increased.

These plans have advantages besides guaranteeing principal repayment and the possibility of sharing in the increased value of a mutual fund.

EXAMPLE

If a client buys the plan several years before withdrawals begin, the guarantee increases by 5% each year until withdrawals start, even if the fund decreases in value. During this period, if the market rises, the three-year reset is in effect. This reset compounds the value of the 5% increases in the guarantee.

If a client starts to take payments immediately after purchasing the plan, she will be susceptible to earlier losses in the portfolio. In other words, she may never be able to receive more than the principal repayment.

It is necessary to purchase the plan several years in advance of withdrawal, in order to build up the guarantee. The bonuses come in those years regardless of the behaviour of the underlying fund.

These plans are especially suitable for clients with 5 to 10 years to retirement, who cannot afford significant losses in their portfolio during that time. These clients also want to be able to share in the growth of selected financial markets.

GMWB plans provide the potential for growth but with a guaranteed income floor that provides a secure income stream as a base. The income stream can now also be assured for the life of the investor. This provides further peace of mind, knowing that the investment can provide income for life.

GMWB plans come with fees levied to manage the underlying mutual fund(s) and fees levied to fund the GMWB guarantee. The investor may have to pay sales charges when depositing or withdrawing from the contract depending on the sales charge option of the fund(s) chosen.

PORTFOLIO FUNDS

Portfolio funds, which invest in other funds instead of buying securities directly, allow investors to hold a diversified portfolio of segregated funds through a single investment. The responsibility for choosing or rebalancing the asset mix usually rests with the fund company.

Management expenses for portfolio funds are generally higher than for stand-alone segregated funds and guaranteed investment funds, because the investor pays for the asset allocation service, on top of the management costs for the underlying funds.

ATERNATIVE MANAGED PRODUCTS TERMINOLOGY

How well do you know the terminology of the variety of alternative managed products?
Complete the online learning activity to assess your knowledge.

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SUMMARY

1. Identify and distinguish between the features, advantages, and risks of the various alternative managed products discussed.

PPNs

- Structured as debt instruments that include a principal guarantee and interest payments. Performance is tied to an underlying asset.
- Investors can access markets they normally could not access with a small investment while still protecting the principal invested.
- Less transparent than the information available with mutual funds, and this makes them more difficult to evaluate.
- Risks include market, liquidity, credit, and currency risks.

Hedge Funds

- Lightly regulated pools of capital run by managers who have great flexibility in applying a variety of investment strategies.
- Manager focus is on absolute returns in any market condition, lower correlation with traditional asset classes, and the potential for lower volatility and higher returns.
- Risks include complex investment strategies, lighter regulatory oversight, market, and liquidity risks.

Closed-End Funds

- A managed pool of securities traded on a stock exchange that has a fixed number of shares.
- Offer certain opportunities for investment returns not available to investors in regular mutual funds, such as short selling and leverage.
- Risk relates mainly to trading, liquidity, and leverage. They do not necessarily trade at their net asset value.

Exchange-traded Funds

- Baskets of securities that are constructed like mutual funds but traded like individual stocks on an exchange. ETFs are similar to index mutual funds in that they will hold the same stocks, bonds or other securities in the same proportion as those included in a specific market index.
- Key advantages include diversification though 'buying' the market, low management and operational costs, and tax efficiency.
- Subject to the same risks as individual stocks, including market and sector risk, trading risk, foreign exchange risk, and tracking error.

Segregated Funds

- An insurance contract with two parts: an investment that produces the return and an insurance policy that covers the risk.
- Includes a maturity guarantee that protects the principal from market declines. Death benefits, creditor protection and opportunity to reset the term are additional advantages.
- Exposure to the markets, much like mutual funds, is a key risk.

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2. Identify and describe the costs associated with these alternative managed products.

PPNs

- Lack of transparency in these products prevents investors from clearly understanding all of the costs involved.
- Not protected by the Canada Deposit Insurance Corporation (CDIC).
- Explicit costs include commissions, management fees, early redemption fees, and structuring costs.
- Implicit costs include performance averaging formulas and performance participation caps, and price returns vs. total returns.

Hedge Funds

- Costs include administration fees, and incentive fees subject to a high-water mark.
- A high-water mark ensures that a fund manager is paid an incentive fee only on net new profits.

Closed-End Funds

- Costs include commissions charged at time of purchase and less liquidity relative to mutual funds.

Exchange-traded Funds

- Costs include commissions charged at the time of purchase, management fees, distribution fees, and other operating expenses.

Segregated Funds

- Higher MERs is an important cost to consider.
- Like mutual funds, segregated funds incur fees related to switching, trailers, sales and management expenses. In addition, segregated funds have costs related to maturity guarantees and death benefits.

3. List and compare the requirements to consider before investing in each product.

PPNs

- Creditworthiness of the issuer should be without question and the degree of leverage being used.
- An understanding of the calculation method and the risk factors associated with the underlying asset.
- The principal protection should be worth paying for.

Hedge Funds

- Fund and manager track record are key concerns.
- The underlying strategies and fund features must also be considered.

Closed-End Funds

- Determine whether the discount at which a fund is trading is below historical norms.

Exchange-traded Funds

- Understand the underlying asset being tracked and the risks associated.
- Historical performance.

Segregated Funds

- Review all contract details for limitations and other conditions.
- Review the maturity guarantees and death benefit requirements.

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REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 13 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 13 FAQs.

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SECTION 5

EVALUATING MUTUAL FUNDS

14 Understanding Mutual Fund Performance

15 Selecting a Mutual Fund

16 Mutual Fund Fees and Services

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SECTION 5 | EVALUATING MUTUAL FUNDS

Now that we have a better understanding of the types of mutual funds available in the marketplace, our next step is evaluating fund performance so that you can make better decisions when selecting a mutual fund for a client.

Chapter 14 focuses on the techniques used to measure and evaluate mutual fund performance. We look at comparing mutual funds against a benchmark and how they are ranked relative to their peers.

Chapter 15 provides a method of selecting individual mutual funds. In this chapter, we stress that the selection of a particular mutual fund is the last of the decisions that investors must make, and that the decision follows from the discussions you've had with your clients.

Chapter 16 discusses the fees charged and the services offered by mutual funds. We explain the types of sales fees charged by some funds, and the expenses that investors must bear in exchange for the services provided by their funds. We also discuss automatic plans through which investors may buy and redeem mutual fund investments.

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Understanding Mutual Fund Performance

14

CONTENT AREAS

- **How Is Portfolio Performance Evaluated?**
- **How Is Performance Assessment Conducted?**
- **How Is a Comparison Universe Used?**
- **How Is Quartile Ranking Used?**

LEARNING OBJECTIVES

1 | Describe how portfolio performance is evaluated, calculate and interpret the total return and risk-adjusted rate of return of a portfolio.

2 | Describe how mutual fund performance is measured and how the comparative performance of mutual funds is determined.

3 | Define quartile and explain how to interpret quartile performance results.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

appraisal firms

benchmark

benchmark index

comparison universe

investment policy statement

peer group

performance assessment

performance universe

quartile

risk-adjusted rate of return

Sharpe ratio

survivorship bias

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INTRODUCTION

Once a mutual fund has been selected, being able to measure and evaluate performance, particularly over a certain time or evaluation period, is an important function of the mutual fund sales representative. You can use this information with your clients to better assess the overall suitability of the fund you have recommended. Performance measurement also gives you an opportunity to evaluate how well the fund manager did over the evaluation period relative to the cost of management.

You can measure fund performance by looking at its total rate of return. This return is based on the interest and dividend income generated within the fund as well as the increase (or decrease) in the value of the securities. But is a 5% return good or is a 10% return better?

Answering these questions requires a comparison of the return on a mutual fund to the returns of similar funds or to an established market benchmark—the S&P/TSX Composite Index for example.

How are performance benchmarks used? A mutual fund manager who reports a 5% return when the fund's comparison benchmark reports a –4% return over the same period can claim superior performance for the year. In contrast, a manager who posts a 10% return when the benchmark reports a 20% return performed poorly over the evaluation period.

This chapter explores finding answers to the following question:

- Are the assets selected by the mutual fund manager adding value to the funds' performance beyond comparable funds or beyond the level of a passive market index? Answering this question involves performance assessment.

HOW IS PORTFOLIO PERFORMANCE EVALUATED?

The success of a portfolio manager is determined by comparing the total rate of return of the portfolio being evaluated with the average total return of comparable portfolios. In this way, the portfolio manager and the client can compare their returns to industry norms and estimate their approximate ranking in relation to other portfolio managers.

For most individual investors, the ranking can be estimated most easily by comparing their performance with the averages shown in one of the surveys of funds appearing regularly in financial publications. Not only is it convenient, but many different funds are measured in the surveys and the portfolio manager can compare both the total return and the component returns of the portfolio. For example, the equity component of a diversified portfolio can be compared with the equity funds shown.

Managers are often measured against a predetermined **benchmark** that was specified in the investment policy statement. An **investment policy statement** refers to a formal document that guides the overall asset management of a portfolio.

One common benchmark is the T-bill rate plus some sort of performance benchmark (e.g., T-bill rate plus 4%).

MEASURING MUTUAL FUND PERFORMANCE

Performance measurement involves the calculation of the return realized by a portfolio manager over a specified time interval called the evaluation period.

The most frequently used measure of mutual fund performance is to compare NAVPS at the beginning and end of a period. Usually this method is based on several assumptions, including the reinvestment of all dividends. The increase or decrease at the end of the period is then expressed as a percentage of the initial value.

$$\frac{(\text{Ending NAVPS} - \text{Beginning NAVPS})}{\text{Beginning NAVPS}} \times 100 = \text{Gain}$$

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Consider the following example:

Beginning NAVPS	$19.50
Ending NAVPS	$21.50
Gain :	$\frac{\$21.50 - \$19.50}{\$19.50} \times 100 = 10.26\%$

This calculation assumes that the investor made no additions to or withdrawals from the portfolio during the measurement period. If funds were added or withdrawn, then the portfolio return as calculated using this equation may be inaccurate.

CALCULATING THE RISK-ADJUSTED RATE OF RETURN

It is not enough merely to compare the returns of two portfolios to measure performance, without factoring in the risk assumed to earn those returns.

EXAMPLE

Mutual fund A and mutual fund B both had a total return of 7% over the past 12 months. One might say that the two funds had the same performance. However, when you look at the standard deviation (a measure of risk) of both funds, you realize that for the same period, Fund A had a standard deviation of 5% while Fund B had a standard deviation of 10%. For the same return, Fund B held twice the risk as Fund A. The comparison of return now has a new perspective, as fund B took more risk than fund A to achieve the same return.

A tool has been developed to take into consideration both the risk and the return of a portfolio. The **Sharpe ratio**, used by mutual fund companies and portfolio managers, compares the excess return of the portfolio (i.e., the return on the portfolio minus the risk-free return) to the portfolio's standard deviation, thereby taking the portfolio's risk into account. It measures the portfolio's **risk-adjusted rate of return** using standard deviation as the measure of risk.

$$S_p = \frac{R_p - R_f}{\sigma_p}$$

Where:

S_p = Sharpe Ratio

R_p = Return of the portfolio

R_f = Risk-free rate (typically the average of the three-month Treasury bill rate over the period being measured)

σ_p = Standard deviation of the portfolio

EXAMPLE

A Canadian Equity Fund called DEF had an average fund return of 6% and a standard deviation of 5%. The average risk-free return was 1%.

For this example, the Sharpe ratio of the fund is calculated as shown below.

Sharpe ratio:

$$S_{DEF} = \frac{6 - 1}{5} = 1$$

The fund had a positive Sharpe ratio, which means that it had an average return greater than the average risk-free return.

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OTHER FACTORS IN PERFORMANCE MEASUREMENT

Dissimilarities in portfolios also make accurate performance comparisons difficult. For example, portfolios may have different risk characteristics and/or special investor constraints or objectives. When such factors affect returns, the conclusions drawn from the performance comparisons should be adjusted to reflect the impact of the variables.

Because of the large number of variables in the management and measurement of portfolios, assessing investment performance is difficult. Regardless, when performance comparisons are made, investors should be concerned primarily with longer-term results since they best measure a manager's ability in all phases of the business cycle. Also of importance are consistency of results and the trend of performance as indicated by the results over the last few measurement periods.

HOW IS PERFORMANCE ASSESSMENT CONDUCTED?

Performance assessment involves comparing a mutual fund manager's results with those of an established and reliable benchmark to determine if there has been a comparatively "good" return on investment. This assessment is based on two kinds of benchmarks:

- Benchmark indexes—the performance of a well-known market index.
- Comparison universe—the performance of a group of funds that have comparable asset classes and risk profiles.

In addition, measures of performance used in comparing funds must adhere to certain standards. In particular, measures should:

- Identify superior, ordinary and inferior performance.
- Not require manipulation, assuming the measure itself is fundamentally sound.
- Be sufficiently realistic to be useful in practice.

A measure is useful only if it is based on data and comparable time periods. You can rely on the major data providers for relevant benchmark data, such as Morningstar and the Globe and Mail. However, you must use the same time period when comparing mutual fund performance to its benchmark; otherwise, your analysis will be irrelevant.

To interpret results in mutual fund performance accurately, you need a basic understanding of measurement methods and their strengths and weaknesses. Two methods for comparing mutual fund portfolio performance to a benchmark are presented here.

BENCHMARK INDEXES

All mutual funds have a benchmark index against which their return can be measured, for example, the S&P/TSX Composite Index for Canadian equity funds, the S&P 500 for U.S. equity funds, or the FTSE TMX Canada Universe Bond Index for Canadian bond funds. A **benchmark index** is an index that reflects a mutual fund's investment universe and can be used as a standard against which performance can be measured. The benchmark chosen must be relevant—an equity fund cannot be compared against a bond index, as the comparison is made on two different types of securities.

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Table 14.1 shows the various benchmark indexes commonly used to compare mutual fund performance.

Table 14.1 | Key Canadian Mutual Fund Benchmarks

Index	Description	Performance uses
S&P/TSX Composite	The largest listed equities that trade on the Toronto Stock Exchange as measured by market capitalization	Canadian equity funds
S&P/TSX 60	The 60 largest companies that trade on the TSX as measured by market capitalization	Canadian large-cap equity funds
S&P 500	The 500 largest publicly held companies that trade on U.S. markets	U.S. equity funds
MSCI EAFE Index	The MSCI Inc. index of European, Australasian, and Far East stocks	Non-North American equity funds
FTSE Canada Universe Bond Index	Broad measure of the Canadian government and corporate bond market	Canadian bond funds
FTSE Canada 91-Day T-Bill Index	The return of 91-day Canadian Treasury Bills	Cash component of a portfolio or money market funds
MSCI Canada ESG Leaders Index	Large and mid-cap Canadian companies with strong ESG ratings	Canadian ESG funds
MSCI World ESG Leaders Index	Broad measure of global companies with strong ESG ratings	Global ESG funds

The benchmark indexes are used in the following ways:

- If a fund reports a return that is higher than the return on the index, we can say that the fund has outperformed its benchmark.
- If a fund reports a return that was lower than the return on the index, we can say that the fund has underperformed its benchmark.

HOW IS A COMPARISON UNIVERSE USED?

The most popular method of relative performance evaluation is to compare a mutual fund's return with the performance of a **peer group**, which is made up of mutual funds with similar investment mandates. The collection of mutual funds that form the basis for comparison is also called a **comparison universe** or **performance universe**. For example, if you wanted to measure the performance of a Canadian large cap equity fund you would compare this fund's results with all other Canadian large cap equity funds.

If a fund posted a one-year return of 12% while the average return of its peer group over the same period was 9%, we can say that the fund outperformed its peer group over the evaluation period.

Comparison universes are constructed by professional performance **appraisal firms** such as Morningstar and the Globe and Mail, for example. These firms collect performance information from a large number of mutual funds and report this information on a regular basis.

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ISSUES THAT COMPLICATE MUTUAL FUND PERFORMANCE

When comparing mutual fund performance, one must avoid comparing the performance of two funds that are dissimilar (e.g., a fixed-income fund versus a growth equity fund) or comparing funds that have differing investment objectives or degrees of risk acceptance.

One complicating factor occurs when the name or class of fund does not accurately reflect the actual asset base of the fund. Investors should be aware, for example, that funds classified as Canadian equity funds may at times have significant portions of their assets invested in equities other than Canadian stocks. This is not to suggest that the fund manager is doing something wrong. Each manager must consider market trends and adjust the timing of the fund's investments. It does, however, suggest that the published results are often comparing apples with oranges.

This discrepancy between a fund's formal classification and its actual asset composition can impair attempts to create a portfolio. For example, an investor who wished to allocate 10% of a portfolio to gold stocks might be surprised to find that, at some points, gold mutual funds are holding 50% of their assets in cash. This results in an actual asset allocation of 5% in gold rather than the desired 10%.

RISK

Another factor that complicates comparisons between funds is that there is often no attempt to consider the relative risk of funds of the same type. One equity fund may be conservatively managed, while another might be willing to invest in much riskier stocks in an attempt to achieve higher returns.

Any assessment of fund performance should consider the volatility of a fund's returns. There are a number of different measures of volatility, but each attempt to quantify the extent to which returns will fluctuate. From an investor's standpoint, a fund that exhibits significant volatility in returns will be riskier than those with less volatility. Measures used to quantify volatility include:

- the standard deviation of the fund's returns
- beta
- the number of calendar years it has lost money
- the fund's best and worst 12-month periods
- the fund's worst annual, quarterly or monthly losses

Standard deviation measures how volatile a fund has been over a past period to give an indication of how it might behave in the future. If a fund has consistently earned a 5% return per year over the past 20 years, although there is no guarantee, it would be reasonable to expect that the fund will earn 5% in the future. If, however, a fund's annual return fluctuated from a negative 20% to a positive 20% over a period of 20 years, it is much less likely that the fund will earn a return of 5% in the coming year. Standard deviation is a common measure of the consistency of a fund's return. The higher the standard deviation, the more volatile or unpredictable the return may be.

Other methods, which look at different time periods, can be used to calculate best-case and worst-case scenarios. Ratings systems based on multiple periods avoid placing too much emphasis on how well or poorly the fund did during a particular short-term period.

An advisor who deals with mutual funds should be aware of how the fund tends to perform relative to the stock market cycle. Some will outperform others in rising markets, but do worse than average in bear markets. The beta, available on most fund performance software, measures the extent to which a fund is more or less volatile than the underlying market in which it invests. The greater the variation in the fund's returns, the riskier it tends to be. Particular attention should be paid to periods during which the fund lost money.

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HOW IS QUARTILE RANKING USED?

Quartile ranking is used to assess performance of a fund manager relative to its peer group. Like professional sports, where the best performer is first among peers and the worst performer is last, mutual fund managers are ranked from best to worst within their peer group.

A **quartile** sorts performance into four equal parts or blocks. For instance, if you are looking at a peer group of 100 Canadian equity funds, there would be four quartiles made up of 25 funds each. The quartiles are given a rank—1, 2, 3, or 4—to show how well a certain fund performed compared to all other funds in the peer group:

- 1st quartile—Top 25 funds with the highest returns
- 2nd quartile—Next 25 best performers
- 3rd quartile—Next 25 performers
- 4th quartile—Bottom 25 performers in the peer group

The number of individual funds in a peer group can be any number. For example, consider a Canadian Equity Balanced Fund Universe comprised of 872 funds. In this case, the 1st quartile would be comprised of the 218 top performers, the 2nd quartile would be comprised of the next 218 best performers and so on until the 218 worst performers, who would be ranked in the fourth quartile.

Although a fund manager would strive to generate first quartile results every year, in reality this would be very difficult to accomplish. Most fund managers would aim for stable and consistent performance in the top two quartiles.

Figure 14.1 shows the quartile performance of ABC Equity Fund, a hypothetical Canadian equity fund that is part of a universe of 100 other similar funds. Only a sample of the funds in this peer group are presented and not the full 100 funds. Professional appraisal firms would list all the funds classified within the selected classes.

Figure 14.1 | Sample Quartile Ranking

Quartile Rank: Canadian Equity Funds					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
ABC Fund	2	3	2	3	3
DEF Fund	1	1	3	4	2
GHI Fund	1	1	2	1	1
JKL Fund	4	3	4	3	4

The ABC Fund ranked comparatively average in performance, hovering between the second and third quartile over the five-year evaluation period. However, the ABC Fund achieved a relatively stable performance, given the fact that its returns, while never in the first quartile, or top performers of the group, were never in the fourth quartile either.

In comparison, the GHI Fund showed superior performance relative to the other funds by consistently ranking in the top quartile in four out of the five years. In contrast, the JKL Fund was the weakest performer in this peer group.

When comparing performance, it's also worthwhile pointing out that the longer the evaluation period, the more stable the returns of the comparison universe. You should not put too much importance on quartile rankings over the short-term, such as one-year returns. Shorter term rankings are more volatile. In assessing fund suitability for a client, the consistent performers should rank higher in choice than the volatile performers.

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DRAWBACKS OF THE COMPARISON UNIVERSE METHOD

The comparison universe method has pitfalls that can compromise its accuracy and usefulness. For example, the contents of comparison universes must be carefully defined so that you know exactly what the portfolio is being compared against. This is not always the case. A balanced fund universe may contain a range of incomparable portfolios from mainly equity-based funds with a modest bond component to bond funds with small stock exposure. It is important to compare "apples to apples."

A performance universe defined too broadly also does not help to assess risk. In a universe comprised of equity portfolios, managers who concentrate on particular subgroups of stocks, such as small-capitalization firms, will have different risk characteristics than the universe in general. Similarly, general bond universes are not representative of managers specializing in high-yield bonds. Because comparisons must be made among funds that take similar risk profiles the benchmark universe may not be appropriate for all fund performance measurements.

All comparison universes also exhibit some degree of survivorship bias no matter how carefully the universes are constructed. **Survivorship bias** develops as defunct portfolios drop out and are excluded from rankings in subsequent quarters. A performance universe is essentially a universe of survivors. Funds that are terminated or cease to exist are usually those who have been unsuccessful.

As a result of this bias, adequately performing managers can appear to have underperformed as the investment period lengthens. For example, a manager with median performance every quarter will increasingly rank lower in the surviving universe in the 3-year, 5-year and 10-year return comparisons. This appearance of deteriorating performance as the investment period lengthens makes average and moderately good fund managers look more like underperformers as the historical period of comparison lengthens.

Finally, appraisal firms and analysts each have their own unique methods of universe construction and compilation. The differences are substantial enough that a mutual fund manager may rank in the top half of managers in one universe and in the bottom half of a competing firm's universe.

As you can see, the comparison universe approach would not work as a passive investment strategy. Drawbacks of the performance universe approach are summarized in Table 14.2.

Table 14.2 | Drawbacks of the Comparison Universe in Performance Assessment

Problems	Effects
Definition of universes	Universes too broadly or too variably defined are not comparable.
Matching of risk profiles	Universes that do not match for risk are not representative.
Universe size	Universes that are too small (e.g., through partitioning into sub-universes) are not reliable.
Survivorship bias	Termination of unsuccessful funds may result in performance universes that are biased.

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Case Study | It's All Relative: Benchmarking Portfolio Performance (*for information purposes only*)

Barry recently received his quarterly investment portfolio statement. His portfolio is a growth-orientated mix of eight funds, with an approximate weighting of 60% equities, 30% bonds and 10% cash. Of the five equity mutual funds he holds, four of them have returned over 10% during the last year. The fifth fund, the ABC Emerging Markets Equity Fund (the fund), has fallen in value over the last 12 months. Barry is confused, as he has read in the news that emerging markets are far-outpacing developed world nations in economic growth. He concludes that it must be the fund itself that is underperforming.

Barry meets with Tom, his mutual fund representative, to discuss the performance of the fund and to review alternative investment options for his portfolio's emerging markets exposure. At the meeting, Barry expresses his concerns regarding the fund to Tom, and states that he wants to sell the fund and replace it with another one.

Tom reviews Barry's goals, re-confirms his investment profile and reviews his portfolio's mutual fund holdings. Barry and Tom examine each of the mutual fund's performance against their:

- Appropriate mutual fund peer groups (e.g. Canadian Equity Large Cap)
- Relevant benchmark (e.g. the S&P/TSX Composite Index)
- Beta relative to the appropriate benchmark

Tom also pulls up the mutual funds' Morningstar profiles, which contain their risk-adjusted returns relative to their peers that are captured through Morningstar's 5-star rating system, five being the best and 1 being the worst.

After conducting the analysis and making the appropriate comparisons, Tom determines that all of the funds are performing well. In particular, despite posting a negative return over the last year, the ABC Emerging Market Equity Fund has:

- Outperformed 90% of its peers in the emerging markets equity group
- Exceeded the return of the MSCI Emerging Markets Equity Index, which posted a larger loss than the fund over the past 12 months as emerging market equity indices fell around the world
- Achieved a beta of 0.8, meaning that it was less volatile than the relevant Index
- Was rated 5-stars by Morningstar for its relative and risk-adjusted performance

Tom also explains to Barry that, while emerging markets equities had a poor year, their long-term outlook continues to be strong, presenting important growth and diversification opportunities for his portfolio. The fund has posted better-than-average returns over 3, 5 and 10 years, and Tom reiterates the importance of maintaining a long-term perspective when considering a fund's performance.

MUTUAL FUND PERFORMANCE TERMINOLOGY

There are different methods of determining and comparing mutual fund performance. Can you define the terminology associated with fund performance? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Describe how portfolio performance is evaluated, calculate and interpret the total return and risk-adjusted rate of return of a portfolio.
   - Performance evaluation looks at how the mutual fund manager outperformed or underperformed comparable funds or a predetermined benchmark.
   - Performance measurement involves the calculation of the return realized by a portfolio manager over a specified time interval called the evaluation period.
   - In measuring performance, the risk assumed to earn those returns must be taken into account. This is done through the use of the Sharpe ratio.
2. Describe how mutual fund performance is measured and how the comparative performance of mutual funds is determined.
   - Benchmark indexes are well-known market indexes (e.g., the S&P/TSX Composite Index, the FTSE TMX Canada Universe Bond Index) to which the performance of the mutual fund can be compared.
   - The comparison universe (also called performance universe or peer group) is composed of a universe of mutual funds with similar characteristics compared to the one under evaluation.
   - When comparing mutual fund performance, one must compare the performance of two funds that are similar or comparing funds that have the same investment objectives or degrees of risk acceptance.
   - Any assessment of fund performance should consider the volatility of a fund's returns.
3. Define quartile and explain how to interpret quartile performance results.
   - A quartile sorts performance into four equal parts or groups within the peer group, also called the comparison universe, or the universe of funds.
   - The first quartile represents the best performers in the group with the highest returns, while the fourth quartile represents the worst performers of the group.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 14 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 14 FAQs.

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Selecting a Mutual Fund 15

CONTENT AREAS

How Does Volatility Impact Mutual Fund Returns?

What Are the Steps in Selecting a Mutual Fund?

What Other Elements Should Be Considered When Analyzing and Selecting Mutual Funds?

LEARNING OBJECTIVES

1 | Describe the risk-return trade-off between the different types of mutual funds, and list and define the different sources of volatility that impact fund returns.

2 | List and describe the steps in selecting a mutual fund and perform calculations related to the different measures of volatility.

3 | List and analyse the four elements of mutual fund selection: people, philosophy, process, and performance.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

alpha

assets under management (AUM)

beta

Canadian Investment Funds Standards Committee (CIFSC)

default risk

exchange rate risk

growth at a reasonable price (GARP)

growth investing

holdings-based style analysis

interest rate anticipation

interest rate risk

market risk

momentum investing

returns-based style analysis

reward-to-risk ratio

sector rotation

sector trading

security selection

simple rate of return

style analysis

style drift

unique risk

value investing

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INTRODUCTION

In Section 2, you learned that clients must have financial objectives and must select investments that are consistent with those objectives, keeping in mind financial circumstances, personal circumstances, investment knowledge and risk profile.

You learned that one of the most important decisions for clients is the asset allocation decision, which determines how much of each asset class should be held in their portfolios. Asset allocation can be aggressive with a heavy weight given to the equity component, conservative with a heavy weight given to the money market component, or anything in between. The asset allocation must reflect financial objectives and all constraints, including of the client's risk profile.

It was also stressed that portfolios should be well diversified. In this framework, selecting a mutual fund or group of mutual funds is the final thing that you and your clients must do. In many cases, it is the mutual fund sales representative who does all the analysis and makes specific mutual fund recommendations to the client.

This chapter explains what to look for when selecting individual mutual funds. The process involves looking at a fund's risk and return profile and past performance data. Mutual fund sales representatives must be able to explain and interpret sources of published mutual fund performance information. In this, however, there is no method of selecting individual mutual funds that can guarantee positive returns. Usually, the best that investors can do is to base their decisions on past performance. Unfortunately, the past is not always a good predictor of the future.

HOW DOES VOLATILITY IMPACT MUTUAL FUND RETURNS?

You saw in Chapter 8 that different securities have different risk and return characteristics. The same is true for mutual funds.

It seems reasonable to expect that the risk and return of different types of mutual funds should depend on the securities making up their investment portfolios (recall that risk is defined as the volatility of return over time). If this is the case, you would expect money market mutual funds to be less risky than bond funds, and bond funds to be less risky than equity funds. In fact, this is precisely the case.

The mutual fund industry has created a variety of funds designed to meet the diverse needs of the Canadian investing public. Because each fund type or group will hold different types of securities and will pursue different investment objectives, the risk and return between the various funds will also differ.

Figure 15.1 illustrates the risk-return trade-off between the different types of mutual funds.

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Figure 15.1 | Risk and return between different types of mutual funds

There are other types of mutual funds in addition to the ones presented in Figure 15.1. For example:

- The returns on short-term bond funds are riskier than money market funds and less risky than bond funds.
- The returns on preferred dividend funds are riskier than bond funds but less risky than equity mutual funds.
- Global mutual funds, depending on the types of securities they hold, can be almost anywhere on the risk/return spectrum.

The most important thing to remember is that the risk level or volatility in returns of a mutual fund is directly related to the risk level or volatility in the returns of the securities it holds in its investment portfolio. This means that funds of the same type (for example, equity mutual funds), cannot be expected to have necessarily the same level of volatility.

In addition, it is possible that funds generally regarded as lower in volatility may actually have higher volatility than others. For example, zero coupon bonds are very volatile. It is likely that a zero-coupon bond fund will be more volatile than a bond fund, especially in a period of volatile interest rates.

What is the source of this volatility? Why does the return earned from a security not stay the same over time? The simple answer is that when there are more buyers than sellers of a particular security, to be a successful buyer you must outbid your rivals. This bidding activity pushes up the price of the security, which affects the returns. Similarly, when there are more sellers than buyers, the successful seller must be willing to let his security go at a lower price than the other sellers. This will push prices down.

There are always investors in the marketplace looking for money-making opportunities. Investors may suddenly decide that a given stock is trading at too low a price and put in orders to buy it in expectation that the price will rise. They may have just received information about a new product that the company has developed or a new acquisition, and they believe that this new product or acquisition will increase the company's future profitability.

Although other factors may change a security's price, new information is the key. When new information about a security becomes available, investors' beliefs change about the value of the security, and buying and selling occurs. If the new information is favourable, the price of the security will move up; if unfavourable, then the price will move down. In this process, some investors have better information than others, often the result of superior analysis.

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Some securities are very sensitive to new information. For example, the stock of a high-technology company will react strongly to new information about the company's products. A new discovery can result in a substantial price increase. Similarly, the price of a bio-technology firm may be negatively affected by the news that a drug has failed to obtain approval by regulators. Other securities are not particularly sensitive to new information. For example, although the shares of the bio-technology stock may be negatively affected by bad news, the bonds of that same company may not be affected to the same degree.

If a security's price is affected by new information, and if new information arrives frequently, then its price will tend to be volatile, and so will the returns that it generates. This source of volatility is specific to a given security and is known as unique risk. When more than one security is held in a portfolio, these unique risks tend to cancel each other out. Well-diversified portfolios, those consisting of a large number of different securities, will almost completely eliminate unique risk.

Even well-diversified portfolios have risk, however. After the unique risks are eliminated through diversification, you are still left with market risk. For example, rising interest rates tend to make investors uncertain about the future profitability of all stocks, which tends to depress the stock market as a whole. Market risk cannot be eliminated through diversification. All mutual funds except money market funds have some amount of market risk, depending on the composition of the portfolio. If a mutual fund tries to specialize in a few "good bets" in the hope of earning higher returns, it will be subject to unique risk as well, due to the lack of diversification.

Other sources of volatility, discussed earlier in this course and reviewed in Table 15.1, have to do with the specific nature of a security.

Table 15.1 | Sources of Volatility in Mutual Funds

Type of risk	Source of risk	Ways to reduce risk
Unique risk (also called specific risk)	Sensitivity of a security's price to new information leading to changes in demand	Diversify
Default risk	The unique risk that a bond coupon will not be paid	Avoid specializing in corporate bonds
Market risk (also called systematic risk)	Changes in the overall market affecting an entire class of securities	None
Exchange rate risk	Changes in the relative value of the currencies of the countries of investment	Hedging
Interest rate risk	Changes in interest rates leading to changes in fixed-income securities prices	Avoid specializing in fixed-income securities

The point is that the volatility of any security or mutual fund is the result of the interplay of a number of risk factors. Because mutual funds are made up of different securities with different risk factors, the volatilities of the funds are also different.

VOLATILITY AND MUTUAL FUND RETURNS

Can you identify the relative volatility of mutual funds and their sources? *Complete the online learning activity to assess your knowledge.*

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WHAT ARE THE STEPS IN SELECTING A MUTUAL FUND?

Analyzing volatility is one of the key steps in the process of selecting a mutual fund. To select individual funds within each mutual fund category, it is recommended that you follow a step-by-step process similar to that shown in Figure 15.2.

Figure 15.2 | Steps for Selecting a Mutual Fund

1. Refer to sources of published mutual fund performance data.
2. Identify funds with appropriate investment objectives.
3. Look for funds with the best long-term performance.
4. Among the best long-term performers, look for best performance from year-to-year.
5. Among best year-to-year performers, find those with lower volatility.
6. Among the funds with low volatility, find ones where the current investment manager was responsible for the good performance.
7. Compare fund facts documents and compare prospectuses.
8. Examine fees and charges.
9. Analyze the size of the mutual fund.
10. Make the decision.

Each step is taken up in more detail in the sections that follow.

RESEARCH THE PERFORMANCE DATA

There are numerous sources of data about mutual fund performance, many of them Internet-based. The Globe and Mail newspaper provides a twice-yearly 15-year mutual fund review, in February and November (see www.theglobeandmail.com). Morningstar Canada (www.morningstar.ca) is another commonly used source of objective data about mutual fund performance.

Depending on how deep you dig, data for each mutual fund could include a return indicator, a volatility indicator, whether the fund is eligible for deferred tax plans, total assets, net asset value per share (NAVPS), the distributions paid, Management Expense Ratio (MER), sales fee structure, quartile rankings over three, five and 10 years, and performance data over short and longer terms along with benchmark comparisons. In many cases, a graph is included showing how an investment of $10,000 in a particular mutual fund has done over the period since its inception and it includes the appropriate benchmark comparison to show whether the fund has performed above or below its benchmark.

FOCUS ON APPROPRIATE INVESTMENT OBJECTIVES

After gathering performance data, you and your client must focus on funds that are similar in terms of investment objectives. It is improper, not to mention misleading, to attempt to compare the performance of funds with different objectives. For example, money market funds are expected to offer lower performance than equity funds over the long run and also to be much lower in risk. Comparing a money market fund with an equity fund in terms of performance therefore would not be appropriate. Finding that a particular equity fund is a better performer than a particular money market fund would tell you nothing about the performance of the equity fund in relation to its risk category.

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FOCUS ON BEST LONG-TERM PERFORMANCE

After finding funds with appropriate investment objectives, look for the funds with the best long-term performance. For example, if the ABC Equity Fund has a 10-year compound rate of return of 18.1%, it means that an investor who bought that fund 10 years ago and held it until the record date of the listings would have earned an average annual return of 18.1%. This includes the reinvestment of all dividends, those distributed by the fund as well as dividends that reflect the capital gains earned on the mutual fund's portfolio of common shares sold at a gain. The 18.1% is the net return the investor would have earned, after all management fees and expenses were paid by the fund. However, it does not include charges that individual investors may have paid, such as sales fees.

Many mutual funds have limited performance data, because they have been in existence for only one to three years. This lack of long-term data may be a problem. A client seeking good long-term performance, a goal consistent with investment in an equity fund, will find it difficult to judge the potential for long-term performance of a fund that has been in existence for such a short time. Even if short-term performance is good, there is no guarantee that in a different phase of the economic cycle the fund will continue to do so well. A fund with a strong 10-year performance, on the other hand, has usually been through at least one complete market cycle and perhaps two.

An equity fund with less than three years of performance data does not give a good idea of how the fund will perform over the longer term. When comparing mortgage funds, as suitable shorter-term investments, however, three years would be a more acceptable period. Performance data for both bond funds and equity funds should be long enough to cover one complete market cycle, at least five years.

FOCUS ON BEST YEAR-TO-YEAR PERFORMANCE

After finding comparable funds with good long-term performance, look for funds with the best performance from year to year. In comparing two funds, the one with less variation in simple rates of return from year to year is a more consistent performer. A **simple rate of return** is the return earned by the fund over a given year or period. Simple rates of return are useful for looking at the consistency of returns. Consistency is important. Although equity funds are intended for the long-term, if liquidity is needed, the fund with a more consistent performance is less likely to be sold at a loss.

Simple rates of return also tell effectively how well a mutual fund performs when the markets have turned bearish, anticipating a fall. Some investors focus on this aspect of a mutual fund's performance. For example, if a mutual fund went up 25% in a year when the overall market increased by 27%, but went down 25% when the overall market declined by 20%, the fund may not be an ideal investment for a conservative client. Such a client would prefer a fund that went up 18% in the first instance, for example, but went down 8% in the second instance, offering greater protection on the downside.

FOCUS ON GOOD PERFORMERS WITH LOWER VOLATILITY

Some sources indicate the relative volatility of mutual funds and are based on the funds' standard deviation of return. Recall that standard deviation is a statistical measure of risk. The larger the standard deviation, the greater the volatility of returns and therefore the greater the risk. The more a return departs from the mean, the higher the deviation, and thus the higher the volatility. In general, for funds with the same long-run compound rate of return, those with lower volatility should be preferred (all other things being equal).

Measures of volatility other than standard deviation include ratios, such as the reward-to-risk ratio and the Sharpe ratio, and beta.

REWARD-TO-RISK RATIO

Some published sources provide a measure that shows return for risk. This measure is called the **reward-to-risk ratio**. In its simplest form, it is just the return earned by the fund over a period divided by the standard deviation.

$$\text{Reward-to-risk ratio} = \frac{\text{Fund Return}}{\text{Fund Standard Deviation}}$$

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For example, a fund might earn a one-year return of 14% and have a standard deviation of return of 28% per year. The reward-to-risk ratio is 0.5. This means that this fund earns 0.5% for every 1% of standard deviation. If another fund had a ratio of 0.6, you would say that the fund was able to earn a better return for that same 1% of standard deviation.

EXAMPLE

The return on ABC fund was 9.8% last year, while its standard deviation was 5.5% over the same period. What is the reward-to-risk ratio for the ABC Fund?

$$\text{Reward-to-risk ratio} = \frac{9.8\%}{5.5\%}$$

The reward-to-risk ratio for the ABC Fund is 1.78. This means that ABC earns 1.78% of return for every 1% of standard deviation.

SHARPE RATIO

As indicated in the previous chapter, the Sharpe ratio shows how well the return of a portfolio compensates the investor for the risk taken. It is often used to compare the performance of mutual funds among themselves and against benchmarks. If a fund manager is being measured against a benchmark, the portfolio's Sharpe ratio can be compared to the Sharpe ratio of the applicable benchmark. The higher the Sharpe ratio, the more return the portfolio got for the same level of risk. A group of portfolios can therefore be ranked by their risk-adjusted performance:

- A mutual fund with a Sharpe ratio greater than the Sharpe ratio of the benchmark outperformed the benchmark.
- A mutual fund's Sharpe ratio that is smaller than the benchmark's signals underperformance.
- A negative Sharpe ratio means the mutual fund had a return less than the risk-free return.

EXAMPLE

A Canadian Equity Fund called DEF had an average fund return of 6% and a standard deviation of 5%. The Canadian Equity Benchmark had an average fund return of 8% and a standard deviation of 10%. The average risk-free return was 1%.

For this example, the Sharpe ratio of the fund and its benchmark are calculated as shown below.

Sharpe ratio:

$$S_{DEF} = \frac{6 - 1}{5} = 1$$

Benchmark:

$$S_B = \frac{8 - 1}{10} = 0.70$$

Both the fund and the benchmark had a positive Sharpe ratio, which means that both had an average return greater than the average risk-free return. However, the DEF risk-adjusted return was higher than the benchmark's risk-adjusted return. That means that DEF was able to earn a greater return for each unit of risk compared to the benchmark. Even though the benchmark produced a higher total return, the benchmark employed twice as much risk to do so.

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Both the reward-to-risk ratio and the Sharpe ratio give an indication of how successful the fund has been in earning a return per unit of risk (standard deviation).

BETA

The **beta** or beta coefficient (discussed earlier in this course) compares the volatility of an equity fund to the volatility of the stock market as a whole. Any equity fund that moves up or down to the same degree as the stock market has a beta of 1.0. Any equity fund that moves up or down more than the market has a beta greater than 1.0, and an equity fund that moves less than the market has a beta of less than 1.0. Thus, the higher the beta, the higher the fund's volatility compared to the stock index volatility. The lower the beta, the lower the fund's volatility compared to the stock index volatility.

FOCUS ON FUNDS WITH SUCCESSFUL INVESTMENT MANAGERS

After isolating high-performing funds with low volatility, look for funds in which success can be attributed to the performance of the current investment manager. Good performance is the result of a combination of luck and good management. If good performance persists over a long period, it's likely that good management is the cause rather than luck. Over short periods, it is harder to say.

There are two issues with manager data. First, few funds have retained the same manager(s) over long periods. Second, many funds are managed by investment advisory firms, and there may be no way of knowing which individuals have been responsible for the funds. If reliable data are available, however, a fund with good performance over the long run with the same manager in charge suggests that the continuation of good performance is partly due to the manager's skill.

One additional performance measure to consider is the alpha on a fund. **Alpha** is a measure of the manager's performance. If alpha is positive, the manager has produced more return than predicted by the manager's beta and thus the manager has added value to the portfolio. The greater the alpha, the better the manager has done. On the other hand, an alpha value of zero indicates the manager has achieved only normal performance, meaning the manager has added nothing. If alpha is negative, the manager has underperformed for the level of risk taken on.

COMPARE FUND FACTS DOCUMENTS AND COMPARE PROSPECTUSES

At this point in the selection process, you and your client have reduced the field down to only a few competing funds. Now is the time to get the fund facts documents and prospectuses from the candidates. Even if funds are in the same category (equity funds, for example), there may be significant differences in investment practices and in the potential make-up of the investment portfolio. Your clients will want to make sure that the fund they select provides the best possible match to their investment objectives.

These disclosure documents will provide complete data on sales charges, valuation, minimum investment requirements and so forth. This information can be quite relevant. Some funds, for example, require initial investments of $100,000 or more.

EXAMINE FEES AND CHARGES

Performance data reflect management fees and operating expenses charged to the fund. They do not include charges paid by individual investors, however, such as acquisition and redemption fees. If the investment time horizon is short, high sales fees will substantially reduce the returns that can be earned.

Management fees are included in return calculations. While higher management fees may be easier to ignore in good times, they can lead to higher capital losses in poor times. All things being equal, it is better to choose a fund with a lower MER (management expense ratio).

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The same reasoning applies to sales fees. If liquidity is a concern, sales fees can end up being very costly. For example, if a client holds a mutual fund investment for 10 years, but had to pay a 5% acquisition fee, you can think of that fee as being spread out (or amortized) over the life of the investment. If the fund has performed well, the sales fee will not have had too bad an impact. However, if the client is forced to sell after one year, the fund would have had to earn 5% *after* management fees and expenses just for the client to break even.

The same logic applies to funds with redemption fees, but to a lesser extent. Most redemption fees decline over time, such that a fund held for the long term will not charge a fee upon redemption. However, if the fund is sold prematurely, those fees could be quite high.

Most reported sources of data indicate whether the funds charge acquisition and redemption fees. These details are available in the fund facts document and prospectus. If the fund is expected to be a long-term investment, a redemption fee may be more beneficial to the client than an acquisition fee. Keep in mind though that a redemption fee reduces the flexibility of choice when a client wants to get rid of the investment sooner than expected for any reason.

For funds with similar overall characteristics, select the one with the lowest MER. Over a long investment time horizon, a high MER can result in a much lower amount of accumulated returns.

ANALYZE THE SIZE OF THE FUND

One factor in selecting a mutual fund is the size of the fund relative to other funds in the same category. Many people share the belief that as mutual funds grow beyond a certain size their beneficial economies of scale start to break down. Very large mutual funds may be at a disadvantage compared to smaller funds because they cannot shift their large portfolios as rapidly. Also, large purchases or sales in the relatively small Canadian market tend to have an impact on the price of the securities the funds are trying to buy or sell.

Many investors shy away from newer, smaller funds because they have been untested in the market and have not gone through a full market cycle. Others, however, feel it is best to take advantage of the momentum that newer funds offer, before they become too large or perform less well.

MAKE THE DECISION

Making the final decision involves selecting the fund with the best long-term performance relative to risk (volatility), obtained by the manager responsible for the fund's performance. You and your clients may end up selecting a fund in which you have great confidence. In many cases, investors must make trade-offs among the factors on which they base their decisions. For example, the fund with the best long-term performance might be an inconsistent or volatile performer, have relatively high sales fees, or require an initial investment far beyond investors' means.

After a fund is selected, there is no guarantee that the fund will perform as anticipated. The fund manager might change, the economy could enter a phase that a previously high-performing manager might not understand as well, or the manager could even have a string of bad luck. The weakness of any selection process is that investors are prisoners of past data, and the future is never quite the same or entirely knowable.

WHAT OTHER ELEMENTS SHOULD BE CONSIDERED WHEN ANALYZING AND SELECTING MUTUAL FUNDS?

You will find mutual funds in most asset classes. The **Canadian Investment Funds Standards Committee** (CIFSC), the body that oversees mutual fund classification, lists more than 50 categories containing more than 7,000 funds. The CIFSC tracks investment funds on a security-by-security holdings basis. For purposes of category assignment, security types are grouped into five broad asset classes: *Cash, Fixed-Income, Equity, Commodity, and Other*.

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The CIFSC calculates all holdings figures and other portfolio statistics used for categorization, based on a time-weighted average over a 36-month period, with an emphasis on the most recent 12 months of data. Theoretically, a client can buy any specific exposure in equities (Canadian, U.S., sector, dividend, international, global, emerging market, small cap, larger cap, index); fixed-income (Canadian, U.S., foreign, high yield); balanced (tactical, Canadian, global); or money market (Canadian, U.S.) funds. See the CIFSC website at www.cifsc.org for full classification details.

Given the enormous breadth of choice, how do you select appropriate mutual funds and create a portfolio? This becomes more than a simple investment decision. Buying a mutual fund means having a business relationship with the management firm. Therefore, qualitative as well as quantitative elements must be weighed. Assuming a risk assessment is completed and an asset allocation is in place, you must then consider four elements of mutual funds before selecting suitable candidates: people, philosophy, process and performance.

PEOPLE

"People" refers to the personnel of the investment firm that manages a particular fund. Ideally, a fund should be headed by a portfolio manager with several years of experience and backed by a team of analysts, client service staff, back office staff and technology. An ideal organization should have strong, stable ownership and be well capitalized to fund future growth. The portfolio managers should have an equity stake in the firm, with performance bonus incentives.

PORTFOLIO MANAGER AND INVESTMENT TEAM

Evaluation of the portfolio manager and the investment team may be the most important part of the mutual fund assessment process. Without a good portfolio manager leading a competent investment team, all other factors become irrelevant.

Portfolio managers should have several years of experience successfully managing money in their area of specialization, long enough to encompass at least the ups and downs of one market cycle (generally five years or more). Also, it is helpful if their experience matches the investment specialization in the type of funds that clients desire.

Portfolio managers should be able to focus largely on investment management. Managers are responsible for a broad range of duties beyond investment research. There are ethical and regulatory compliance requirements and business issues, plus client service, marketing and sales. Good investment management firms have enough resources to address these needs and allow their investment professionals to focus on portfolio management.

OWNERSHIP

Strong and stable ownership supplies the leadership necessary to grow the business and keep employees motivated. Strong ownership provides staff with all the tools they need and sets the tone for culture and morale. It also creates an atmosphere of certainty that keeps the firm focused on providing the best investment analysis possible.

FIRM'S BUSINESS

Steady growth in clients and in **assets under management** (AUM) is a good sign. The number of client accounts and the level of AUM should be sufficient to enable the firm to pay for overhead, technological infrastructure, and salaries plus bonuses and profit sharing.

Another key point to consider is the diversification of the client and product list. It is not uncommon to find firms with a handful of large clients comprising the bulk of AUM. The more diverse the client list, however, the smaller the potential negative impact on the firm's asset base if a client takes its assets away.

The firm should also offer a sufficient breadth of products. Given the cyclical nature of the investment industry, where one moment small-cap stocks might be in favour and then value stocks the next, it is prudent business practice to have a broad product base.

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COMPENSATION

If equity (thus profit sharing) is not available to all employees, management should have well-structured performance incentives in their place. Bonuses should be based on performance, aligning the interests of the fund investors with the investment manager. It is ideal if managers are required to invest their personal money alongside that of their clients. Studies have shown that managers are more likely to outperform their benchmarks when pay is closely linked to performance.

COMPLIANCE

Superior investment management organizations should possess internal checks and balances against poor practices and conflicts of interest. The integrity of the manager reflects on the quality of the firm.

Good compliance practice extends to all aspects of the business. Compliance should be the domain of a senior non-investment officer. All trades made by the firm should be frequently and regularly audited. Trades made by the portfolio managers should be routed through the firm's trading desk, where transactions for buying and selling securities occur. Managers should not conduct trades for their own account, their spouse's or those of members of their immediate family. Senior investment staff should sign a disclosure statement of personal holdings.

PHILOSOPHY

Another factor to consider when choosing a fund is the firm's investment philosophy. An investment philosophy is a coherent way of thinking about how markets work and how they might be incorrectly priced. Several philosophies co-exist in the market, any one of which could be correct at a given time. There is no right or wrong philosophy, in other words. Superior investment firms should clearly articulate their investment philosophy. The more clearly they can explain it, the more likely they will be able to execute it consistently and successfully, and the better clients can harmonize their investment philosophy and risk profile to that of the investment firm.

Equity and fixed-income investment philosophies can each be classified into distinct management styles, shown in Tables 15.2 and 15.3.

Table 15.2 | Philosophies of Equity Investing

Value Investing	A conservative approach to money management. Value investors want to buy a firm or equity fund for less than what the assets in place are worth. They avoid paying large premiums for growth companies and seek bargains in mature companies that are out of favour. Value investors have a better chance of succeeding if given a long time horizon (at least five years).
Growth Investing	A style concerned more about the future prospects of a firm than its present price. A firm might be trading for more than its intrinsic value, but growing earnings are expected to increase the value beyond its current price. Growth investors seek companies in sectors entering a period of expansion. Growth sectors have limited competition, high-quality research and development programs, relatively low labour costs, and strong returns on invested capital. Growth investors usually estimate earnings growth and buying on high expected future rates or high historical rates.
Sector Rotation	Sector rotation is a portfolio manager's attempt to profit through timing. It is based on the belief that different industries will perform well during certain stages of the economic cycle. Industries expected to outperform would be overweighted. More emphasis is placed on industry weighting than on security selection.

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Table 15.2 | Philosophies of Equity Investing

Momentum Investing	Momentum managers believe that strong gains in earnings or stock price will translate into stronger gains in earnings or stock price. They tend to use technical or quantitative stock selection models with some fundamental variables to smooth out the volatile nature of the style. It is a high-risk, high-return strategy. Momentum portfolios typically have high turnover rates as failing stocks are sold. Portfolios also tend to be more concentrated in certain areas of the economy than other funds.
Growth at a Reasonable Price (GARP)	GARP is a value approach to buying earnings growth. GARP managers, like growth managers, seek companies with projections of growing earnings and high and increasing ROEs (return on equity) relative to the industry average. Unlike growth managers, GARP managers avoid stocks with high P/Es (price/earnings ratios).

Table 15.3 | Philosophies of Fixed-Income Investing

Interest Rate Anticipation	This strategy involves moving between long-term government bonds and very short-term T-bills, based on a forecast of interest rates over a certain time horizon. Price sensitivity to interest rate movements increases as the term to maturity increases and the coupon decreases.
Security Selection	Selecting bonds involves fundamental and credit analysis and quantitative valuation of individual securities. Fundamental analysis of a bond considers the nature of the security and the potential cash flow. Credit analysis evaluates the likelihood that the payments will be received as contracted. Credit analysis also considers the issuer's industry conditions, the economy and other macroeconomic factors, as well as factors specific to the issuer.
Sector Trading	Sector traders vary the weights of different types of bonds held within a portfolio. A portfolio manager forms an opinion on the valuation of a specific sector of the bond market based on its credit fundamentals and on relative valuations compared to historical norms and technical factors, such as supply and demand. Investors willing to assume interest rate risk can add return to their portfolios by holding high-yielding securities from a specific sector.

PROCESS

If philosophy is the belief system on which assets are managed, process is the methodology by which value is accrued to the fund. No one process at any time can be said to be superior to another, but good investment organizations should have two outstanding qualities of process:

- elements that are verifiable and transparent
- decision-making procedures that are team-based

PROCESSES

Processes are the tools used and the way they are coordinated to manage and grow assets. Processes can include records of company visits and manager interviews, screening and selection criteria, proprietary economic analysis, sector and stock weight ranges, maximum and minimum number of holdings, risk monitoring, and a selling discipline. Outstanding organizations demonstrate unique tools or innovative ways of combining these tools.

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TEAM-BASED APPROACH

Whatever process and tools are used, mutual fund investors should favour firms that emphasize a team-based approach to managing money. Under the team-based approach, an individual may or may not have total decision-making power, but the structure of the investment process is team-dependent. That means no individual has a dominant influence on the investment process.

An investment approach that emphasizes a team-based decision-making process is especially good in the context of succession planning and business continuity. Continuity is important over the long run if the firm is to profitably and reliably execute the firm's investment process despite any losses of key personnel.

EXAMPLE

A firm may have a team of analysts supporting a number of portfolio managers. The team's job is to screen an initial universe of stocks down to a small group that meets the firm's valuation criteria. Though individual managers can buy any stocks within the group, they usually cannot go outside the approved list. Managers may come and go over the years, but the fund will retain a disciplined investment process because it resides with the team rather than an individual.

All things equal, it is preferable to select a fund with a team-based approach than one that relies on an individual.

PERFORMANCE

Performance is the legacy of the investment philosophy as it is applied through the investment process by the people of the firm. Performance considers more than just added value over a given benchmark. It also accounts for a manager's consistency and frequency of relative performance plus the risk taken to get good returns. Performance also takes into consideration the consistency of investment style over time. Good management more consistently and more frequently outperforms its benchmark and its peers per unit of risk. It is easy to judge past performance but difficult to project it into the future.

Style analysis is the study of style drift (change in a manager's investment style over a period of time) in a fund's holdings or returns over time. **Style drift** is given important consideration in performance analysis for several reasons (performance analysis was discussed in Chapter 14). For example, a small-cap manager that invests in large caps during a period of small-cap underperformance cannot be said to be a skillful small-cap manager. The more style drift that exists in a manager's investment approach, the more difficult it becomes to separate manager skill from sheer coincidence.

Two methods of style analysis are returns-based and holdings-based.

- **Returns-based style analysis** was developed by Nobel Prize-winning economist William Sharpe. He suggested that a fund's investment style can be determined by comparing the fund's returns (usually 36 to 60 months of data) to the returns of a number of selected passive style indexes. These indexes represent different investment styles or asset classes such as large-cap value, large-cap growth, small-cap growth, small-cap value, government bonds or cash equivalents.

  Example: The return of ABC large-cap Canadian equity index fund is compared to the S&P/TSX 60 index, which includes the 60 largest companies of the S&P/TSX index.

- **Holdings-based style analysis** examines each stock in the portfolio and maps it to a style at a specific point in time. Style can be determined by capitalization, price-earnings ratio or dividend yield. Once a large enough history of snapshots is generated, a profile of the fund's average style can be developed and used as the custom benchmark.

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Case Study | Sizing Up Samantha's Options: Picking the Right Mutual Fund (*for information purposes only*)

Samantha is meeting with mutual fund representative Christine to review her mutual fund portfolio. Samantha is a conservative investor whose portfolio's strategic asset allocation consists of 65% bonds, 30% equities and 5% cash. In preparation for the meeting, Christine has reviewed and analyzed Samantha's mutual fund holdings. In doing so, she has determined that one of Samantha's funds is not suited for her portfolio and she has prepared a recommendation to replace it.

At the meeting, Christine explains to Samantha that during her review of Samantha's portfolio, she determined that the XYZ US Equity Fund was not an appropriate fit for her portfolio. Given Samantha's conservative investment profile, she should only be investing in a fund that:

- consists of blue chip, high quality, dividend-paying large cap companies' stocks
- has a lower than 1.0 beta relative to the benchmark, the S&P 500 Index
- has a relatively small standard deviation
- is hedged to manage foreign-exchange exposure to reduce return volatility
- has a solid long-term track record with steady returns

Christine explains to Samantha that the XYZ US Equity Fund failed on all of these fronts based on her analysis, as it includes a number of mid-cap investments, it had a beta of 1.2, a standard deviation of +/– 19%, does not use hedging and has had return swings that were far too big over the last 10 years.

Instead, Christine recommends the LMN US Dividend Fund, which, based on her review:

- consists of top-quality, blue chip dividend-paying large cap US companies with steady, long-term stock performance
- has a beta of 0.7 relative to the S&P 500 Index benchmark, keeping volatility low
- a standard deviation of +/– 12%, one of the lowest in its peer group
- of the fund's prospectus, foreign currency exposure is fully hedged, further reducing return volatility
- has maintained steady, year-to-year returns over its long existence

Samantha asks if there are any other ways to determine the quality of the fund. Christine shows her the fund's Morningstar report, highlighting for her the fund's 5-star rating based on its relative, risk-adjusted performance, while also noting the fund's large cap, dividend stock focus. She shows Samantha the simplified prospectus, which notes the long-standing tenure of the fund manager and highlights the fund's mandate to generate a low-volatility/consistent return experience for investors. Samantha is delighted with the recommendation and directs Christine to switch the funds.

INVESTMENT PHILOSOPHIES

How well can you match investment philosophies to their definitions? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

1. Describe the risk-return trade-off between the different types of mutual funds, and list and define the different sources of volatility that impact fund returns.
   - The volatility of returns of a mutual fund is directly related to the volatility of the returns of the securities it holds in its investment portfolio.
   - The risk-return trade-off between the different types of mutual funds goes from money market funds showing the lowest level of risk to specialty funds showing the highest level of risk.
   - When there are more buyers than sellers of a particular security, to be a successful buyer you must outbid your rivals. When there are more sellers than buyers, the successful seller must be willing to let his security go at a lower price than the other sellers.
   - New information has an impact on the price of a security. If the new information is favourable, the price of the security will move up; if unfavourable, then the price will move down.
   - Unique risk relates the sensitivity of a security's price to new information leading to changes in demand.
   - Market risk represents the changes in the overall market affecting an entire class of securities.
2. List and describe the steps in selecting a mutual fund and perform calculations related to the different measures of volatility.
   - Refer to sources of published mutual fund performance data.
   - Identify funds with appropriate investment objectives.
   - Look for funds with the best long-term performance.
   - Among the best long-term performers, look for best performance from year-to-year.
   - Among best year-to-year performers, find those with lower volatility.
   - Among the funds with low volatility, find ones where the current investment manager was responsible for the good performance.
   - Compare fund facts documents and compare prospectuses.
   - Examine fees and charges.
   - Analyze the size of the mutual fund.
   - Make the decision.
   - The reward-to-risk ratio is the return earned by the fund over a period divided by the fund's standard deviation.
   - The Sharpe ratio shows how well the return of a portfolio compensates the investor for the risk taken. It is often used to compare the performance of mutual funds among themselves and against benchmarks.
   - The beta or beta coefficient compares the volatility of an equity fund to the volatility of the stock market as a whole.
   - Alpha is a measure of the manager's performance. If alpha is positive, the manager has produced more return than predicted by the manager's beta and thus the manager has added value to the portfolio.

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3. List and analyse the four elements of mutual fund selection: people, philosophy, process, and performance.
   - After completing a risk assessment and an asset allocation, you must then consider four elements of mutual funds before selecting suitable candidates: people, philosophy, process and performance.
   - "People" refers to the personnel of the investment firm that manages a particular fund.
   - Evaluation of the portfolio manager and the investment team may be the most important part of the mutual fund assessment process.
   - An investment philosophy is a coherent way of thinking about how markets work and how they might be incorrectly priced.
   - Equity investment philosophies can each be classified into distinct management styles: value, growth, sector rotation and growth at a reasonable price (GARP), while fixed-income investment philosophies can each be classified into interest rate anticipation, security selection and sector trading management styles.
   - Processes are the tools used and the way they are coordinated to manage and grow assets. Processes can include records of company visits and manager interviews, screening and selection criteria, proprietary economic analysis, sector and stock weight ranges, maximum and minimum number of holdings, risk monitoring, and a selling discipline.
   - Performance accounts for a manager's consistency and frequency of relative performance plus the risk taken to get good returns. It also takes into consideration the consistency of investment style over time.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 15 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 15 FAQs.

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Mutual Fund Fees and Services 16

CONTENT AREAS

- **What Are the Fees and Charges of Mutual Funds?**
- **What Are Accumulation Plans?**
- **What Are Systematic Withdrawal Plans?**
- **How Are Mutual Funds Taxed?**

LEARNING OBJECTIVES

1 | Distinguish among the various fees and charges that apply to mutual fund investors and to mutual funds themselves.

2 | Compare and contrast the different types of accumulation plans that mutual funds offer and describe the concept of dollar cost averaging.

3 | Compare and contrast the different types of systematic withdrawal plans available to mutual fund investors and assess which withdrawal plan best suits a client's circumstances.

4 | Describe the tax effects of mutual fund redemptions and income distributions.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

account closing fee

accumulation plan

acquisition fee

adjusted cost base

annuitant

annuity

dollar cost averaging

explicit costs

fixed-dollar (constant) withdrawal plan

fixed-period withdrawal plan

frequent trading charge

front-end load

fund sponsor

implicit costs

life withdrawal plan

load

management expense ratio (MER)

management fee

no-load fund

operating expenses

pre-authorized investment plan

purchase price per unit

ratio withdrawal plan

right of redemption

sales charges

sales commission

service fee

set-up fee

systematic withdrawal plan

T3 form

T5 form

trading costs

trailer fee

trailing commission

transfer fee

trustee fee

turnover rate

variable annuity

voluntary accumulation plan

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INTRODUCTION

Mutual funds charge a number of different fees. Some of them, such as management fees, are charged by all funds, while others, such as acquisition fees and redemption fees, are charged by some. The first objective of this chapter is to explore the different types of fees and charges.

The second objective is to look at the special services provided by many mutual funds. These special services include accumulation and redemption plans through which investors can regularly buy or sell mutual fund securities. A popular concept discussed in this chapter in relation to accumulation plans is dollar cost averaging. The chapter concludes with a discussion of tax implications of mutual fund ownership.

To advise clients appropriately and well, a mutual fund sales representative needs a thorough understanding of mutual fund fee structures, special services, and tax implications.

WHAT ARE THE FEES AND CHARGES OF MUTUAL FUNDS?

Mutual funds incur two types of fees: **sales charges** (or **sales commissions**) and management fees. Sales charges are the fees charged to individual investors when they buy mutual funds shares (these fees are generally called loads). **Management fees** are the fees payable by the fund to the fund's service providers. The management fees are charged out as expenses against the entire fund's earnings and are disclosed in the fund facts document.

All mutual funds charge management fees. Management fees are deducted from the fund's return to pay for professional management and administrative services provided to the fund. These fees depend on the nature of the fund and range on average from 0.5% of net assets per year to 3% of net assets per year or more.

Mutual funds can be categorized on the basis of the type of sales charges, or **load** that is levied. Sales charges are typically either front-end fees, paid upon the purchase of mutual fund units, or no fees at all. A sales fee that is paid upon purchase is called a **front-end load**. Mutual funds that do not charge sales fees are known as **no-load funds.**

In addition to the management fees and load charges, mutual fund investors may pay an annual charge called a **trailer fee**. The trailer fee is the annual fee based on a fixed percentage of assets. It is paid to mutual fund sales representatives to service existing clients rather than concentrate solely on making new sales to earn income. Trailer fees can range anywhere from 0.25% per year for money market funds to 1.00% per year for equity funds and are included in the overall management fees.

The actual level of the sales charge levied by load funds depends on the type of fund, its sponsor and method of distribution, the amount of money being invested, and the method of purchase (i.e., lump sum purchases versus accumulation plans spread out over a period of time). A client may be able to negotiate the front-end load with the salesperson, especially if a large amount of money is involved, as this load is set by the distributor.

Many mutual funds, primarily those offered by direct distribution companies, banks and trust companies, are sold to the public on a no-load basis, with little or no direct selling charges. However, some discount brokers may levy modest "administration fees" to process the purchase. Like other funds, no-load funds charge management or other administrative fees.

Trying to calculate the impact of fees on mutual funds can be very complicated. The Ontario Securities Commission and Industry Canada's Office of Consumer Affairs have developed a new online calculator that allows investors to determine the impact of mutual fund fees on investment returns over time. The Mutual Fund Fee Impact Calculator is located at www.getsmartaboutmoney.ca.

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FEES PAID BY INDIVIDUAL MUTUAL FUND INVESTORS

Different kinds of fees can be charged to investors when they invest in mutual funds. You must differentiate these fees, when they are applied and how to calculate each of them. You should also know that mutual funds offered by direct distribution companies, banks and trust companies, are generally sold to the public on a no-fee basis (no-load funds), with little or no direct selling charges. The fees paid by individual investors generally include acquisition fees, redemption fees, transfer fees, and others.

ACQUISITION FEES

Acquisition fees (also called front-end loads or sales charges) are charged by many mutual fund distributors. An **acquisition fee** is a sales charge based on the dollar value invested in a mutual fund, and it is payable at the time units of the fund are acquired.

Investors should be aware that the front-end load effectively increases the purchase price of the units, thereby reducing the actual amount invested.

EXAMPLE

A $1,000 investment in a mutual fund with a 4% front-end load means that $40 (4% × $1,000) goes to the distributor by way of compensation, while the remaining $960 is actually invested.

Sales charges must be disclosed in the fund facts document both as a percentage and in dollars of the amount invested. In the example above, the fund facts would state that the front-end load charge would be 4% of the amount purchased and $40 of the $1,000 invested. While this is not explicitly stated in the fund facts document, the $40 sales charge represents 4.17% of the amount actually invested in units since only $960 will be invested out of the $1,000 paid ([$40 ÷ $960] ×100 = 4.17%).

To determine a fund's offering or **purchase price per unit** when it has a front-end load charge, you must first determine the NAVPS and then make an adjustment for the load charge. Using a NAVPS of $12 and a front-end load of 4%, the offering or purchase price per unit is calculated as:

$$\text{Offering or Purchase Price} = \frac{\text{NAVPS}}{100\% - \text{Sales Charge}}$$

So:

$$\text{Offering or Purchase Price} = \frac{\$12}{100\% - 4\%} = \frac{\$12}{1.00 - 0.04} = \frac{\$12}{0.96} = \$12.50$$

The above calculation shows that if you buy a fund with a NAVPs of $12 and a 4% front-end load, the fund units would actually cost you $12.50. Note that the sales charge of 4% of the offering price is the equivalent of 4.17% of the net asset value (or net amount invested):

$$4\% \text{ of } \$12.50 = \$0.50$$

$$\frac{\$0.50}{\$12} = 4.17\%$$

Table 16.1 shows the difference between the two methods of sales charge calculations for a $1,000 purchase.

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Table 16.1 | Calculating Acquisition Fees

Purchase Amount	Front-End Load (Acquisition Fees)	Net Amount Invested in the Mutual Fund	Front-End Load as a Percentage of the Purchase Amount	Front-End Load as a Percentage of Net Amount Invested
$1,000	$20	$980	2%	2.04%
$1,000	$30	$970	3%	3.09%
$1,000	$40	$960	4%	4.17%
$1,000	$50	$950	5%	5.26%

It is important to note that the sales charges indicated in the fund facts document are *maximum* charges. In many cases, investors can negotiate lower sales charges regardless of the amount they wish to invest. Competition for investment dollars is fierce, which is why these charges are almost always negotiable.

OTHER FEES

There are several other types of fees that mutual funds charge, these include:

- **Transfer fees** are sometimes levied when mutual fund investors wish to switch investments out of one fund and into another, when those funds are managed by the same fund manager. Most no-load funds do not charge for this service, but funds that charge sales charges may charge up to 2% of the value of assets transferred. Again, these fees may be negotiable.
- Some mutual funds try to discourage investors from redeeming their units soon after purchase by imposing a **frequent trading charge**. In some cases, no charges are applied, but investors are permitted to undertake only a limited number of trades. If the number of trades exceeds the maximum, the investor's holdings in the fund may be redeemed.
- If your clients hold mutual fund investments within RRSPs, RRIFs or RESPs they may have to pay annual **trustee fees** and administration fees for these plans. These fees typically range from $20 to $100 or more per year. Many firms waive such fees if the plan value exceeds a certain amount, such as $25,000.
- Some mutual fund distributors charge a one-time fee the first time an investor purchases mutual fund units. Funds that charge sales charges do not generally charge **set-up fees**.
- Many fund distributors levy a charge when clients close their mutual fund accounts. These **account closing fees** are sometimes waived if the account is closed because of the investor's death.

FEES AND EXPENSES PAID BY MUTUAL FUNDS

Mutual funds make payments to the investment company that is responsible for distributing a particular group of funds. These fees are for services related to the administration of the funds (the operating expenses) and for investment advisory services (the management fee). In the case of one company, for example, each mutual fund must pay a percentage of its net asset value as management fee. The maximum fees range from 0.3% for the Premium Canadian Money Market Fund up to 4% for an International Equity Fund. These fees are stated on an annual basis, are calculated daily and are paid monthly.

Management fees in general range from a low of about 0.5% per year to a high of about 3% per year. Differences in management fees are the result, at least in part, of differences in the costs of providing services to investors. Managing a money market fund does not require as much security analysis as managing an equity fund, for example. Foreign funds tend to be more costly to manage, and their management fees are higher as a result.

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There are operating expenses in addition to management fees that mutual funds must pay to their investment companies. These **operating expenses** arise from the fund's day-to-day activities and may include:

- interest, operating and administrative costs
- securities filing fees
- taxes charged to the funds
- legal and audit fees
- trustee, custodial and safekeeping fees
- investor servicing costs
- costs of financial and other reports, fund facts and simplified prospectuses

Individual investors are not charged directly for the fees that the mutual fund must pay. All fees and expenses are charged to the fund itself and, as a result, decrease the fund's net asset value. In this way, each fund investor automatically pays a proportionate share of those charges.

Mutual funds must report the management expense ratio (MER)—the annual total of all fees and expenses divided by average net assets—in the fund facts document and simplified prospectus. Because the management expense ratio includes expenses in addition to management fees, it will always be higher than management fees stated as a percentage of net asset value.

FEES AND EXPENSES PAID BY FUND MANAGERS

Some fees and expenses are not paid by the mutual fund but are paid instead by the investment company that manages the fund. As a result, these fees and expenses are not borne directly by the funds' investors. However, since the money paid out by the investment company must come from the management fees provided by the mutual funds, investors in those funds pay these fees indirectly.

Many investment companies pay mutual fund distributors an amount based on the net asset value of the distributor's clients' holdings in their fund. Sometimes referred to as a **trailing commission** or trailer fee, this fee is meant to compensate mutual fund sales representatives and advisors for providing ongoing services to clients. This fee is also referred to in some simplified prospectuses as a **service fee**.

Trailer fees generally follow a pattern as shown in Table 16.2 below.

Table 16.2 | Pattern of Trailer Fees

Fund Type	Sold with a Front-End Load
Equity	1.0%
Balanced	1.0%
Bond	0.5%
Money Market	0.25%

MUTUAL FUND COSTS: ANALYSIS AND IMPLICATIONS

Costs are a drag on returns and are impossible to avoid. Given two funds with similar styles and mandates, you should generally select the lower-cost fund. However, a fund's true cost is not easily apparent. Costs appear in two forms: explicit and implicit.

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EXPLICIT COSTS

Explicit costs are those directly borne by the investor. They fall into three categories: management fees, operating expenses and sales charges. Management fees, the largest single expense, compensate the investment firm, known as the **fund sponsor**. The fees help pay for the salaries of the investment professionals and contribute to the firm's profit margin. Operating expenses pay for the costs of running the fund and include taxes, record keeping, auditing fees, rent and utilities. Operating expenses typically range from 0.10% to 0.50% of fund assets.

The management fees and operating expenses are usually bundled into a single amount known as the **management expense ratio** (MER). The MER is the total of management fees and operating costs paid by a fund and is expressed as a percentage of its average net assets. The magnitude of a given MER depends on the four factors shown in Table 16.3: the type of assets, the size of the fund, the fund manager, and the trailer or service fees.

Table 16.3 | Four Factors Affecting the Management Expense Ratio

Type of assets managed by fund	A money manager who primarily invests in Canadian T-bills has a less complex job than one who invests in foreign equities, which is reflected in the management fees. Fees for domestic equity mandates generally run from 1.5% to 3% of fund assets, domestic bonds 1% to 2%, foreign equity 2% to 4%, and less than 1% for index funds.
Size of fund	Portfolios with fewer assets under administration, such as start-ups or small cap funds, are relatively more expensive to run than well-established large cap funds, because the smaller fund's costs are supported by a lower asset base.
Manager of fund	Some funds are managed by the fund sponsor's management team, but some fund companies farm out management of the fund to a specialist firm, or a sub-advisor, and handle only marketing and client service. Generally, the MER of a fund managed by a sub-advisor will be higher than a similar fund run by an in-house management team.
Trailer or service fees	These fees are paid to fund distributors such as mutual fund sales representatives, discount brokers or financial advisors. The fees allow them to service existing clients and not just concentrate on new sales to earn income. A fund that does not have to pay mutual fund sales representatives or other distributors will cost less than a fund that does.

After management fees and operating expenses, the third type of explicit cost is the sales charges, paid to mutual fund sales representatives and financial advisors who recommend the funds to their clients. The charges are applied to the investor separately from the MER.

Information on MERs and sales charges can be found in the fund facts document.

IMPLICIT COSTS

The MER includes all expenses charged to the fund; however not all expenses borne by the investors appear in the MER. **Trading costs** are **implicit costs**, measured by brokerage fees and turnover, and are not expensed in the MER. Instead these costs are capitalized. To illustrate, a stock purchased for $1,000 plus $30 in commissions will be kept on the fund's books as costing $1,030. This represents a higher breakeven hurdle for a manager to overcome.

Trading costs in the form of the Trading Expense Ratio (TER) must also be shown in the fund facts document. The TER represents the amount of trading commissions incurred to manage the portfolio as a percentage of the total assets of the fund. The total fund expenses as presented in the fund facts document is the sum of the MER and the TER.

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Here is an example of fund expenses, as presented in a fund facts document.

Annual Rate (As a % of the Fund's Value)

Management expense ratio (MER)	
The total of the Fund's management fee and operating expenses.	2.42%
Trading expense ratio (TER)	
The Fund's trading costs	0.07%
Fund Expenses	2.49%

Generally, the more often a fund manager trades, the greater the negative impact on fund performance through trading costs. Trading frequency is measured by calculating the fund's **turnover rate**, which is the proportion of a total fund's assets traded in a year. Turnover rate is a statistic usually available in the fund's simplified prospectus and some fund companies include this information in their fund facts document. A fund that has a 100% turnover rate over the course of a year has sold and bought its entire portfolio.

Turnover varies with the investment style. Value funds (those that primarily hold stocks considered to be undervalued in price) typically have turnover rates of less than 50%, while growth funds frequently top 100% or more. Funds that focus on specific countries, regions or sectors will almost always have high turnover. Index funds may have almost no turnover depending on the base index tracked.

Brokerage fees, implicitly borne by investors, may vary by the size of the fund sponsor. Larger companies have an edge on their smaller counterparts, because the large amounts of money managed by bigger firms allow them to negotiate lower trading costs, thereby reducing impact when trading securities. Even if a fund is small, the fund sponsor may have a substantial institutional business enabling it to negotiate lower trading costs.

In general, managers with high turnover rates have a greater risk of underperforming. In addition to the higher costs built into the book value of the portfolio, high turnover creates capital gains tax liabilities and the possibility that winning stocks are sold too early. High turnover managers can outperform their benchmarks, but they will have a more difficult time than lower turnover managers.

Exhibit 16.1 | Cost Matters...Up to a Point

Costs should not be the dominating criteria in the fund selection process. There are funds with high MERs, for example, that are top-performing and trade very actively. It is important that you and your clients understand the costs and the value of services you receive for the costs involved. Here are several points worth considering.

- Do not compare funds strictly on the basis of MER. In light of different trading styles and costs, comparing funds solely on the basis of MER may be misleading.
- Compare performance and volatility before comparing costs.
- A fund's total costs are more important for some funds than for others. For example, the relative return net of expenses of a fixed-income or money market fund is far more negatively affected by high costs than an equity fund. The lower volatility and lower return profile of fixed-income investments means a decreased ability to overcome costs. Therefore, when selecting a fixed-income fund of any class, favour those with the lowest-cost base. The same can be said of index funds where the variance between fund returns is often accounted for by management fees.
- The shorter the time frame, the less costs matter. Conversely, the longer the time frame, the more costs matter. The volatility and randomness of investment returns over short time periods make it difficult to evaluate suitability based on cost. There is very little correlation between fees and performance in the short term. But over the long term (at least five years), the drag imposed by high costs is compounded, making for a substantial penalty on final investment returns.

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Exhibit 16.1 | Cost Matters...Up to a Point

- Costs have no correlation to a manager's ability to manage an investment fund. In other words, a low MER does not guarantee a better return and a high MER does not necessarily mean a lower return.
- Be aware of funds that charge unbundled fees. At first glance these funds have unusually low MERs. A fund that has unbundled fees charges only the operating expense portion directly to the fund. Management fees are charged separately from the operating expenses and are usually invoiced directly to the investor. This is typically the case with a fund of funds structure. While this arrangement has some benefits, such as transparency of costs, it can be misleading when compared to regular mutual funds, which charge all management and operating expenses directly to the fund.
- Keep in mind that funds operating less than a year will report an MER reflecting only the management fee. The level of operating expenses will be unknown until the fund has been in existence for at least a year.
- While costs are inversely correlated to a fund's size, occasionally a fund sponsor will absorb a portion of the fees on their smaller or newer funds until they reach a level of assets where the total fund costs are at a level comparable to other similar funds. As the fund grows, the sponsor will absorb fewer of the costs until the cost structure is comparable to other funds in its class.

WHAT ARE ACCUMULATION PLANS?

Many mutual fund companies offer investors the facility of making automatic periodic purchases of units of a particular mutual fund. This is called an **accumulation plan**, referred to in many simplified prospectuses as a **pre-authorized investment plan**. Accumulation plans usually involve the payment of a fee.

A **voluntary accumulation plan** allows your clients to specify the amount and timing of the periodic investments they are willing to make. They may cancel the plan at any time for any reason, although a small plan termination fee may apply. Clients may usually decide to invest monthly, quarterly, semi-annually or annually. Minimum purchase amounts tend to be smaller for accumulation plan purchases than for one-time purchases.

DOLLAR COST AVERAGING

Accumulation plans offer two benefits to your clients: investment discipline and **dollar cost averaging**. Many of your clients will find it difficult to plan their investments throughout the year. By year end, they find they have not yet made the investments they had hoped to make when the year had begun. By waiting until the end of the year to invest, they might find that they lack funds. Even if funds are available, that they have lost out on the compounding of their investment returns. Accumulation plans help to prevent this.

The second benefit of accumulation plans is that they remove the need for your clients to time the market. Market timing is an attempt to predict the moment to invest in stocks or bonds or to shift investments to different asset classes. It is a difficult thing to do well. Some mutual fund sales representatives suggest that clients should avoid market timing. Instead, they should set a desirable asset allocation consistent with their risk profile and other key factors and then make regular monthly investments according to that asset allocation.

By investing on a monthly basis, your clients will not miss out on market upswings. In a falling market, it is true that clients will pay a higher average cost than if they were to wait until the market hit bottom. But if they make regular purchases, some of their investment dollars will be invested at or close to the market bottom.

The key idea is that by investing regular dollar amounts, the average cost of investment over the long run tends to be lower. This is the principle behind dollar cost averaging.

Table 16.4 shows, in a simplified way, how dollar cost averaging can be of benefit. In the table, two clients each invested $12,000 in the same mutual fund over the same 12-month period. Client A bought $6,000 in June and $6,000 in December while Client B bought $1,000 per month over the 12 months.

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Table 16.4 | Dollar Cost Averaging

Month	NAVPU	Client A	Number of units purchased	Client B	Number of units purchased
January	10.00			$1,000	100.00
February	10.10			$1,000	99.01
March	10.20			$1,000	98.04
April	10.30			$1,000	97.09
May	10.40			$1,000	96.15
June	10.50	$6,000	571.43	$1,000	95.24
July	10.60			$1,000	94.34
August	10.70			$1,000	93.46
September	10.80			$1,000	92.59
October	10.90			$1,000	91.74
November	11.00			$1,000	90.91
December	11.10	$6,000	540.54	$1,000	90.09
	Totals	**$12,000**	**1,111.97**	**$12,000**	**1,138.66**

With the information presented in the table, you can calculate the average cost per unit when dollar cost averaging is used and when it is not used. Without dollar cost averaging, the total number of units purchased is 1,111.97 and the total investment is $12,000. Therefore, the average per unit cost is $12,000 ÷ 1,111.97, or $10.79. With dollar cost averaging, the same total dollar amount is invested ($12,000) but more units are purchased (1138.66). Therefore, the average per unit cost is lower, $12,000 ÷ 1138.66, or $10.54.

The situation is reversed in a falling market; dollar cost averaging will result in higher average per unit cost. But the key thing to remember is that with dollar cost averaging, your clients stand a much better chance of investing some of their money when the market is at its lowest point, thereby getting more units for their money.

Case Study | Persistent Peter: Slow and Steady Wins the Race (*for information purposes only*)

Peter is meeting with Shaina, a mutual fund representative at his bank. Peter is 26 and has just started his first full-time job since graduating from university. Peter explains to Shaina that, while his income is modest, he is confident that over time it will rise as his career advances. However, he also recognizes that he has very few obligations at this point in his life and no debt. So, he wants to take advantage of having greater discretionary cash flow to save before life – marriage, a home mortgage, children, etc. – makes saving more difficult.

While Peter is unsure of what the future holds, he knows that starting a retirement savings plan now will pay off years down the road. He's also heard from his parents that he'll need a lot of money to retire comfortably, and he is unsure how he'll ever get to save that much. Shaina explains that even a small amount saved on a consistent and regular basis into the right investment can build up steadily; and, eventually, it will amount to a substantial nest egg when it is needed to fund his retirement.

Shaina points out to Peter how saving just $100 bi-weekly will amount to $2,600 in a year. If he intends to retire at 65, he'll have almost 40 years to save. Over time, as his income rises, he can adjust his bi-weekly amount to reach his targeted savings goal or he can look forward to a larger retirement fund.

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Case Study | Persistent Peter: Slow and Steady Wins the Race (*for information purposes only*)

Shaina uses her retirement savings calculator to show how saving $100 bi-weekly over 40 years into a portfolio that returns 6% will amount to over $430,000. But given that Peter has such a long investment time horizon he has the capacity to invest in a more growth-focused portfolio. Shaina adjusts the savings plan rate of return to 7%, and advises Peter that his retirement savings would grow to over $570,000.

Shaina then explains to Peter that using no-load mutual funds makes it easy and convenient to save through a regular investment plan, and its benefits will pay off for many years to come.

WHAT ARE SYSTEMATIC WITHDRAWAL PLANS?

A mutual fund's shareholders have a continual right to withdraw their investment in the fund simply by making the request to the fund itself and receiving in return the dollar amount of their net asset value. This characteristic is known as the **right of redemption** and it is the hallmark of mutual funds.

To help your clients who need periodic income, and who wish to stay invested within the fund, many funds offer one or more **systematic withdrawal plans**. In simple terms, instead of withdrawing all the money in a mutual fund, the client instructs the fund to pay out part of the capital invested plus distributions over a period of time. Withdrawals may be arranged monthly, quarterly or at other predetermined intervals.

There are five types of systematic withdrawal plans, which differ in the way in which the periodic receipt of money is calculated. The five types of systematic withdrawal plan are known as fixed-dollar, ratio, fixed-period, life, and annuity.

FIXED-DOLLAR (OR CONSTANT) WITHDRAWAL PLAN

With a **fixed-dollar (constant) withdrawal plan**, clients request to receive a periodic fixed amount of money through the redemption of units of their mutual fund. This is currently the most common type of systematic withdrawal plan. Clients can often request to receive the proceeds from redemptions on a weekly basis up to an annual basis. Typically, clients must be willing to receive at least $100 per payment, but that amount varies from fund to fund.

Most fixed-dollar withdrawal plans require that clients have a minimum value of fund investments before the plan is accepted. This minimum is usually $10,000 but can range from $5,000 to $25,000. There is often a modest annual service fee levied, such as $10 or $25, to maintain a systematic withdrawal plan.

It is important to note that the client decides exactly how much money is to be paid out. In some cases, when the payout is small, the income and capital gains earned by the fund units are sufficient to meet the payment requirement without reducing the client's initial capital. However, if the payout is larger than the combination of income and capital gains earned by the fund units, part of the payout will be made by reducing some of the client's initial capital.

Not all clients realize that a reduction in capital might be required to maintain a minimum periodic payment. As a result, mutual funds offering systematic withdrawal plans are required to have a statement similar to the following in their simplified prospectuses:

> *"If these payments are larger than the amount your investment in the fund is earning, your account will eventually run out of money."*

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Table 16.5 | Example of a Fixed-Dollar Withdrawal Plan

Your client requires $10,000.00 per year.

Year	Beginning of Year Value of Holdings	Percentage Earned	End of Year Value of Holdings	Amount of Withdrawal
1	$ 100,000.00	10%	$ 110,000.00	$ 10,000.00
2	$ 100,000.00	–5%	$ 95,000.00	$ 10,000.00
3	$ 85,000.00	14%	$ 96,900.00	$ 10,000.00
4	$ 86,900.00	–15%	$ 73,865.00	$ 10,000.00
5	$ 63,865.00	20%	$ 76,638.00	$ 10,000.00

Fixed-dollar withdrawal plans are most suitable for clients who look to their mutual fund investments for most of their income. The periodic amount requested under the plan would likely be based on the client's expected expenses.

RATIO WITHDRAWAL PLAN

Rather than request a fixed amount of money to be received on a regular basis, a client may request to receive a fixed percentage of the fund value. For example, a client might request a 10% payout of fund value annually.

Under this method, the client would be faced with the same potential erosion of their capital if income plus capital appreciation is not at least equal to the specified ratio. For example, if the total of income plus capital appreciation is less than 10% when the requested withdrawal ratio is 10%, then some of the initial capital will have to be used to meet the payout requirement.

Under a **ratio withdrawal plan**, the ratio is always based on the current portfolio value. Technically, this means that clients will never fully exhaust their mutual fund investment under this type of plan. Only in the unrealistic situation of a 100% payout ratio would the fund be completely paid out.

Table 16.6 | Example of a Ratio Withdrawal Plans

Your client wishes to withdraw 12% per year.

Year	Beginning of Year Value of Holdings	Percentage Earned	End of Year Value of Holdings	Percentage of Withdrawal*	Amount of Withdrawal
1	$ 100,000.00	10%	$ 110,000.00	12%	$ 13,200.00
2	$ 96,800.00	–5%	$ 91,960.00	12%	$ 11,035.20
3	$ 80,924.80	14%	$ 92,254.27	12%	$ 11,070.51
4	$ 81,183.76	–15%	$ 69,006.20	12%	$ 8,280.74
5	$ 60,725.46	20%	$ 72,870.55	12%	$ 8,744.47

*Withdrawals are assumed to be based on end-of-year value of holdings.

Ratio withdrawal plans are most suitable for clients looking to supplement income from other sources. The reason other sources should be available is that with fluctuating market values, a ratio withdrawal plan will not result in a constant dollar amount paid out.

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FIXED-PERIOD WITHDRAWAL PLAN

Under a **fixed-period withdrawal plan**, your client will receive money over a period of time until the mutual fund investment is completely paid out. In this type of plan, the client chooses a period over which payments will be received. In each year, the client receives an amount equal to whatever value there is in the fund investment divided by the number of years remaining until the end of the period.

For example, if the selected period is five years and the initial fund value is $100,000, then the investor will receive (100,000 ÷ 5 =) $20,000 the first year. In the second year, the client will receive whatever the remaining value of the fund is divided by four. This continues until the client receives all remaining value in the last year.

Table 16.7 | Example of a Fixed-Period Withdrawal Plan

The plan is to be liquidated over five years.

Year	Beginning of Year Value of Holdings	Percentage Earned	End of Year Value of Holdings	Rate of Withdrawal	Amount of Withdrawal
1	$ 100,000.00	10%	$ 110,000.00	1/5	$ 22,000.00
2	$ 88,000.00	–5%	$ 83,600.00	1/4	$ 20,900.00
3	$ 62,700.00	14%	$ 71,478.00	1/3	$ 23,826.00
4	$ 47,652.00	–15%	$ 40,504.20	1/2	$ 20,252.10
5	$ 20,252.10	20%	$ 24,302.52	1/1	$ 24,302.52

This type of plan would be most suitable for a client who has been saving for something that requires funding over a known or limited period, such as a child's post-secondary education. The funds will be required over a fixed period of usually four years, so the withdrawal pattern is selected to match that period. The periodic payments will fluctuate under this plan depending on the volatility of the mutual fund from which payments are made.

LIFE WITHDRAWAL PLAN

The **life withdrawal plan** is similar to the fixed-period plan, except the period selected is the expected remaining lifetime of the client. This remaining lifetime can be estimated from life insurance mortality tables.

Table 16.8 | Example of a Life Withdrawal Plan

This plan reduces the holdings to zero over the client's expected lifetime. If we assume that the client will live for a further 20-year period, we will have:

Year	Beginning of Year Value of Holdings	Percentage Earned	End of Year Value of Holdings	Rate of Withdrawal	Amount of Withdrawal
1	$ 100,000.00	10%	$ 110,000.00	1/20	$ 5,500.00
2	$ 104,500.00	–5%	$ 99,275.00	1/19	$ 5,225.00
3	$ 94,050.00	14%	$ 107,217.00	1/18	$ 5,956.50
4	$ 101,260.50	–15%	$ 86,071.43	1/17	$ 5,063.03
5	$ 81,008.40	20%	$ 97,210.08	1/16	$ 6,075.63
etc.	etc.	etc.	etc.	etc.	etc.

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ANNUITIES

The last type of withdrawal plan is an **annuity**. An annuity is generally a contract between an individual and a life insurance company in which the individual, called the **annuitant**, gives a certain amount of money to the insurance company. In exchange, the insurance company agrees to make regular payments to the individual. These payments might be over a guaranteed term whether or not the individual lives to the end of the term. If the individual dies before the end of the guaranteed term, payments would continue to be made to the surviving spouse or other named beneficiary. Alternatively, annuity payments may end with the death of the annuitant (i.e., annuity payments extend over the life of the annuitant no matter how long the annuitant lives).

Annuities are offered by some mutual fund companies in conjunction with life insurance firms.

While most annuity payments are fixed, one type of annuity is similar to a ratio withdrawal plan in which payments will likely vary from payout to payout. This type of annuity is known as a **variable annuity**. With a variable annuity, payments to the annuitant will fluctuate in keeping with the changes in the value of the mutual fund from which payments are made.

HOW ARE MUTUAL FUNDS TAXED?

After acquiring shares in a mutual fund, the investor may wish to dispose of his or her shares or units and use the proceeds. The mechanics of disposing of fund units are fairly straightforward.

- The client contacts his/her advisor (or discount brokerage) and makes a request to sell or redeem fund units.
- The broker then places the trade request with the fund, or the fund's distributor.
- At the end of the valuation day, the fund calculates the net asset value and the proceeds are sent to the investor.

As we have seen, most funds offer the investor a variety of methods of receiving funds if the investor does not want to redeem a specific number of shares or units. These withdrawals have tax consequences on fund holders.

TAX CONSEQUENCES

Mutual funds redeem their shares on request at a price that is equal to the fund's NAVPS. Mutual funds can generate taxable income in a couple of ways:

- Through the distribution of interest income, dividends and capital gains realized by the fund
- Through any capital gains realized when the fund is eventually sold

ANNUAL DISTRIBUTIONS

When mutual funds are held outside a registered plan (such as an RRSP or RRIF), the unitholder of an unincorporated fund is sent a **T3 form** and a shareholder is sent a **T5 form** by the respective funds. This form reports the types of income distributed that year – foreign income and Canadian interest, dividends and capital gains, including dividends that have been reinvested. Each is taxed at the fund holder's personal rate in the year received.

EXAMPLE

An investor purchases an equity mutual fund for $11 per share and in each of the next five years receives $1 in annual distributions, composed of $0.50 in dividends and $0.50 in distributed capital gains. Each year the investor would receive a T5 from the fund indicating that the investor would have to report to the Canada Revenue Agency an additional $1 in income. The T5 may indicate offsetting dividend tax credits (from dividends earned from taxable Canadian corporations).

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It is sometimes difficult for mutual fund clients to understand why they have to declare capital gains, when they have not sold any of their funds. There is, however, a simple explanation. The fund manager buys and sells stocks throughout the year for the mutual fund. If the fund manager sells a stock for more than it was bought, a capital gain results. It is this capital gain that is passed on to the mutual fund holder. Unfortunately, capital losses that arise when selling a stock for less than it was bought cannot be passed on to the mutual fund holder. The losses are held in the fund and may, however, be used to offset capital gains in subsequent years.

DISTRIBUTIONS TRIGGERING UNEXPECTED TAXES

During the year a mutual fund will generate capital gains and losses when it sells securities held in the fund. Capital gains are distributed to the fund investors just as interest and dividends are distributed. If the distribution of capital gains is carried out only at year end, it can pose a problem for investors who purchase a fund close to the year end.

Consider an investor who purchased an equity mutual fund through a non-registered account on December 1 at a NAVPS of $30. This fund had a very good year and earned capital gains of $6 per share. These capital gains are distributed to the investors at the end of December either as reinvested shares or as cash.

As is the case with all distributions, this caused the NAVPS to fall by the amount of the distribution, to $24 (see Exhibit 16.2 below). At first glance, one might think that the investor is just as well off, as the new NAVPS plus the $6 distribution equals the original NAVPS of $30.

Unfortunately, the $6 distribution is taxable in the hands of the new investor, even though the $6 was earned over the course of the full year. For this reason, some financial advisors caution investors against buying a mutual fund just prior to the year-end without first checking with the fund sponsor to determine if a capital gains distribution is pending. Exhibit 16.2 provides an example.

Exhibit 16.2 | Distributions and Taxes

An investor with a marginal tax rate of 40% purchases a mutual fund with a NAVPS of $30. The portfolio is valued at $30. The fund distributes $6 as a capital gains dividend or distribution. The value of the investor's portfolio after the distribution and the tax consequences would be:

Value of portfolio before distribution:	$ 30.00
Value of portfolio after distribution:	
NAVPS	$ 24.00
Cash or Reinvested Dividends	$ 6.00
	$ 30.00

Tax Consequences:

Assuming that the $6 was a net capital gain: 50% × $6.00 × 40%

= $1.20 Taxes Payable

Note: Even though the fund may call this distribution a "dividend" it is simply a distribution of capital gains. No dividend tax credit would apply.

Transactions that occur WITHIN the fund (such as the fund buying and selling individual securities such as stocks and bonds) could result in income distributions such as a capital gain to fund investors in the year the distribution occurs.

If you are a mutual fund investor and you sell your shares, this transaction is yours and does not occur WITHIN the fund. You simply sell your shares and receive the cash. This transaction could result in a capital gain (but resulted from your own action – not the actions of the fund itself).

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CAPITAL GAINS

When a fund holder redeems the shares or units of the fund itself, the transaction is considered a disposition for tax purposes, possibly giving rise to either a capital gain or a capital loss. Only 50% of net capital gains (total capital gains less total capital losses) is added to the investor's income and taxed at their marginal rate.

Suppose a mutual fund shareholder bought shares in a fund at a NAVPS of $11 and later sells the fund shares at a NAVPS of $16, generating a capital gain of $5 per share on the sale. The investor would have to report an additional $2.50 per share in income for the year (50% × $5 capital gain). This capital gain is not shown on the fund's T5, as this was not a fund transaction.

ADJUSTING THE COST BASE

A potential problem may arise when an investor chooses to reinvest fund income automatically in additional non-registered fund units. The complication arises when the fund is sold and capital gains must be calculated on the difference between the original purchase price and the sale price. The total sale price of the fund will include the original units purchased plus those units purchased over time through periodic reinvestment of fund income.

This mix of original and subsequent units can make it difficult to calculate the **adjusted cost base** of the investment in the fund. If careful records have not been kept, the investor could be taxed twice on the same income. Many investment funds provide this information on quarterly or annual statements. If these statements are not kept, it may be very time consuming to attempt to reconstruct the adjusted cost base of the investment.

Consider the case where an investor buys $10,000 of fund units. Over time, annual income is distributed and tax is paid on it, but the investor chooses to reinvest the income in additional fund units. After a number of years, the total value of the portfolio rises to $18,000 and the investor decides to sell the fund.

A careless investor might assume that a capital gain of $8,000 has been incurred. This would be incorrect, as the $8,000 increase is actually made up of two factors: the reinvestment of income (upon which the investor has already paid taxes) and a capital gain.

The portion of the increase due to reinvestment must be added to the original investment of $10,000 to come up with the correct adjusted cost base for calculating the capital gain. If, for example, the investor had received a total of $3,500 in reinvested dividends over the course of the holding period, the adjusted cost base would be $13,500 (the original $10,000 plus the $3,500 in dividends that have already been taxed). The capital gain is then $4,500, not $8,000.

REINVESTING DISTRIBUTIONS

Many funds will, unless otherwise advised, automatically reinvest distributions into new shares of the fund at the prevailing net asset value without a sales charge on the shares purchased. Most funds also have provisions for shareholders to switch from cash dividends to dividend reinvestment, and vice versa.

Distributions have an impact on the NAVPS of a fund. When dividends and capital gains are distributed, the NAVPS falls by the amount of the distribution. When the distribution is reinvested, the net result is that the investor owns more units, but the units are each worth less.

For example, the NAVPS of a fund is $9.00 the day before a dividend distribution. The fund decides to pay a dividend of $0.90 per unit. After the distribution is made, the NAVPS of the fund will fall by $0.90 to $8.10. As Table 16.9 shows, if this fund had 1,000,000 units outstanding, the NAVPS before the distribution would be $9,000,000 ÷ 1,000,000 = $9.00. The NAVPS after the distribution would be $8,100,000 ÷ 1,000,000 = $8.10.

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Table 16.9 | Impact of a Distribution on Total Net Assets

	Before Distribution	After Distribution	When Distributions Are Reinvested
Assets			
Portfolio	$8,075,000	$8,075,000	$8,075,000
Cash	950,000	50,000*	950,000
Liabilities			
Expenses	(25,000)	(25,000)	(25,000)
Total Net Assets	**$9,000,000**	**$8,100,000**	**$9,000,000**

* Distributions payable: $950,000 cash – ($0.90 dividend × 1,000,000 units outstanding).

Because the investors receive their distribution in new units, the fund now has 1,111,111.11 units worth $8.10 each ($900,000 ÷ $8.10 = 111,111.11 plus the original 1,000,000 units). Total fund assets are still $9,000,000. The $900,000 never actually leaves the company, but is reinvested in the fund.

What impact does this have on the individual investor? As stated above, the investor ends up with more units worth less each. The net effect is that the investor's portfolio is worth the same amount. Table 16.10 illustrates this. Assume that the investor owned 1,000 units of the fund. The investor would receive a distribution worth $900.00 (1,000 units × $0.90). The distribution is invested into new units. These new units now have a NAVPS of $8.10. The investor would receive $900 ÷ $8.10 = 111.11 units. The investor now has a total of 1,111.11 units (1,000 + 111.11).

Table 16.10 | Impact of Distribution on Value of Investment

	Before Distribution	After Distribution
1,000 units × $9.00	$9,000	
1,111.11 × $8.10		$9,000

TAX CONSEQUENCES

Can you calculate the tax consequences of three different clients who have invested in mutual funds? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Distinguish among the various fees and charges that apply to mutual fund investors and to mutual funds themselves.
   - Sales charges are the fees charged to individual investors when they buy and sell mutual funds shares (these fees are generally called loads).
   - A sales fee that is paid upon purchase is called a front-end load; mutual funds that do not charge sales fees are known as no-load funds.
   - Management fees are the fees payable by the fund to the fund's service providers and are charged out as expenses against the entire fund's earnings and are disclosed in the fund facts document and simplified prospectus.
   - Management fees are deducted from the fund's return to pay for professional management and administrative services provided to the fund.
   - Trailer fees are meant to compensate mutual fund sales representatives for providing ongoing services to clients.
   - Explicit costs are those directly borne by the investor. They fall into three categories: management fees, operating expenses and sales charges.
   - Trading costs are implicit costs, measured by brokerage fees and turnover, and are not expensed in the management expense ratio.
2. Compare and contrast the different types of accumulation plans that mutual funds offer and describe the concept of dollar cost averaging.
   - Accumulation plans offer investors the facility of making automatic periodic purchases of units of a particular mutual fund.
   - A voluntary accumulation plan allows your clients to specify the amount and timing of the periodic investments they are willing to make. They may cancel the plan at any time for any reason, although a small plan termination fee may apply.
   - The key idea behind dollar cost averaging is that by investing regular dollar amounts, the average cost of investment over the long run tends to be lower.
3. Compare and contrast the different types of systematic withdrawal plans available to mutual fund investors and assess which withdrawal plan best suits a client's circumstances.
   - Instead of withdrawing all the money in a mutual fund, the fund can pay out part of the capital invested plus distributions over a period of time. Withdrawals may be arranged monthly, quarterly or at other predetermined intervals.
   - With a fixed-dollar (constant) withdrawal plan, clients request to receive a periodic fixed amount of money through the redemption of units of their mutual fund.
   - Under a ratio withdrawal plan, the ratio is always based on the current portfolio value. Technically, this means that clients will never fully exhaust their mutual fund investment under this type of plan.
   - Under a fixed-period withdrawal plan, your client will receive money over a period of time until the mutual fund investment is completely paid out. In this type of plan, the client chooses a period over which payments will be received.
   - The life withdrawal plan is similar to the fixed-period plan, except the period selected is the expected remaining lifetime of the client.

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- An annuity is generally a contract between an individual and a life insurance company in which the individual, called the annuitant, gives a certain amount of money to the insurance company. In exchange, the insurance company agrees to make regular payments to the individual.

4. Describe the tax effects of mutual fund redemptions and income distributions.
   - Mutual funds are redeemed at a price equal to a fund's net asset value per share (NAVPS). Mutual funds redeemed while held in registered funds do not have any immediate tax consequences.
   - Investors holding mutual funds in non-registered accounts are subject to tax on capital gains realized when the fund is sold and on annual distributions of income and capital gains earned within the fund.
   - When dividends and capital gains are distributed, the NAVPS falls by the amount of the distribution, and the investor receives more units from the distribution itself.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 16 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 16 FAQs.

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SECTION 6

ETHICS, COMPLIANCE AND MUTUAL FUND REGULATIONS

17 Mutual Fund Dealer Regulation

18 Applying Ethical Standards to What You Have Learned

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SECTION 6 | ETHICS, COMPLIANCE AND MUTUAL FUND REGULATIONS

Section 6 is all about the rules and ethical principles you must adhere to as a mutual fund sales representative.

Chapter 17 discusses mutual fund regulations, the mandate and scope of securities administrators in Canada and Self-Regulatory Organizations, compliance supervision, registration requirements, sales activities, dealing with complaints, and prohibited practices. This chapter also covers important topics such as federal privacy guidelines as well as anti-money laundering and anti-terrorist financing legislation.

In Chapter 18, we outline the ethical responsibilities and practices expected of all mutual fund sales representatives. As we mentioned in Chapter 1, one of the primary goals of this course is the awareness that delivering excellent client service requires more than just an understanding of the types and features of mutual funds. Your ethical and regulatory responsibility is key to developing long lasting client relationships.

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Mutual Fund Dealer Regulation 17

CONTENT AREAS

- What Are the Mandate and Scope of Securities Administrators?
- What Are Self-Regulatory Organizations?
- What Are the Registration Requirements?
- How Do Representatives and Dealers Meet the Know Your Client Rules?
- What Are the Steps in Opening a Mutual Fund Account?
- What Are the Prohibited Selling Practices?
- What Are the Rules for Communications with Clients?
- What Are Your Other Legal Responsibilities?

LEARNING OBJECTIVES

1 | Describe the role, mandate, and scope of the securities administrators in Canada.

2 | Describe the role and objectives of the Canadian Investment Regulatory Organization (CIRO) and the Autorité des marchés financiers (AMF).

3 | List and explain the registration requirements for becoming registered as a mutual fund dealing representative.

4 | Describe the Know Your Client rule within the context of suitability, the circumstances in which suitability of a client account must be re-assessed, know your product and opening accounts for clients.

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LEARNING OBJECTIVES

5 | List and explain account opening procedures, including the relationship disclosure, the steps in completing the new account application form (NAAF), differentiate among the types of accounts and the circumstances in which Know Your Client information requires an update.

6 | List and distinguish among the prohibited mutual fund sales practices.

7 | Describe the rules applicable to sales and performance communications with clients, including the procedures for handling complaints.

8 | Summarize the importance of the federal privacy guidelines and the anti-money laundering and anti-terrorist financing legislation as part of the requirements of a mutual fund sales representative.

KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

administrative bodies

branch compliance officer (BCO)

Canadian Investor Protection Fund (CIPF)

client name account

disclosure

discretionary trading

dual employment

electronic commerce (e-commerce)

electronic document

electronic signature

enforcement

Financial Action Task Force (FATF)

frequent trader

money laundering

National Instrument 31-103

National Registration Database

New Account Application Form (NAAF)

nominee account

nominee owner

"on book" for brokers

Personal Information Protection and Electronic Documents Act (PIPEDA)

policy statements

privacy commissioner

prohibited selling practices

referral arrangement

registration

regulatory bodies

securities administrator

securities commission

termination

terrorist financing

unsolicited order

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INTRODUCTION

Mutual funds and their distribution are regulated by provincial and territorial securities legislation and regulations. The federal government does not regulate mutual funds. Provincial and territorial legislation and regulations are aimed at protecting investors and maintaining high ethical standards in the issuance and distribution of securities both in the primary and secondary markets. This chapter explains many of the legislative and regulatory requirements applicable to mutual funds and their implications.

The Canadian Investment Regulatory Organization (CIRO) is a self-regulatory organization that is empowered by the provincial and territorial securities administrators to enforce and set rules with regard to its members in Canada. All mutual fund dealers operating outside of Quebec are required to be members of CIRO, unless they apply for and receive an exemption. The Autorité des marchés financiers (AMF) is the primary mutual fund regulator in Quebec.

All mutual fund dealers and their employees must follow the rules and guidelines set out in provincial and territorial legislation, rules, national instruments and if the dealer is a member of an SRO, the SRO's rules and policies. Failure to comply can result in a suspension or revocation of your registered dealing representative status, which could in turn impair your mutual fund dealer's right to trade in *those* securities.

Therefore, it is imperative that you:

- know the laws and regulations that apply to you as a dealing representative
- know your products
- know your clients and their investment needs
- determine the suitability of the investments held in your clients' accounts
- ensure that your clients receive the most current copy of the fund facts document for any fund they intend to purchase along with any and all other documentation
- refer to your supervisor or compliance department in cases where you have any doubt

WHAT ARE THE MANDATE AND SCOPE OF SECURITIES ADMINISTRATORS?

Each of the 13 provinces and territories in Canada is responsible for the administration of their own securities legislation. To achieve this, they have created their own **securities administrators** (also called **regulatory bodies**, **securities commissions** or **administrative bodies**). Some provinces have distinct securities commissions (like the Ontario Securities Commission (OSC)) while others have granted this regulatory responsibility to another provincial agency. In Quebec, for example, the securities administrator is the Autorité des marchés financiers. Collectively, the securities administrators of each province make up the Canadian Securities Administrators (CSA).

The securities administrators have broad powers and their operations break down into three main categories: registration, disclosure, and enforcement, summarized in Figure 17.1.

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Figure 17.1 | Powers of the Securities Administrators

Registration	Unless exempt, everyone who sells securities (mutual funds, stocks, bonds, etc.) or advises investors about securities, must be registered with the appropriate securities administrator or commission. Registration ensures that the registrants (including mutual fund sales representatives, advisors) have completed required courses or have specific designations and identifies the registrants to the securities administrators so they can be monitored for ethical behaviour in selling securities or advising about securities. The registration process in summary will ensure that a particular individual's fitness for registration has been thoroughly evaluated. This includes (as noted above) reviewing the applicant's integrity, financial solvency, and general competence (i.e. proficiencies). In addition, a securities administrator may also evaluate whether there are other factors that may justify denying an individual's application for registration. A securities administrator can suspend or cancel registration if it deems such action is in the public interest. It also has authority over the establishment and operations of any stock exchange in its jurisdiction.
Disclosure	The securities administrators ensure that all documents and other required information are prepared in accordance with requirements and provided to appropriate parties in a timely manner. These documents include insider trading reports, annual and interim financial reports, and reports of material changes in the affairs of entities that have issued securities to the public. The securities administrators also review all prospectuses to ensure that the facts contained therein represent full, true, and plain disclosure. Complete, accurate and timely disclosure allows your clients to make fully informed investment decisions.
Enforcement	Violations can be carefully investigated and offenders may be prosecuted. Securities administrators have the authority to subpoena witnesses, seize documents for examination and operate as administrative tribunals. The securities administrators may also prosecute a violator in the courts, which may result in imprisonment and/or substantial fines.

The securities administrators periodically issue **policy statements**. These statements set out the position of the securities administrators on various issues and topics and can take one of three forms:

National Instruments and National Policies	National Instruments and National Policies have been adopted by all provinces and territories. Although there is no federal regulator in Canada, National Policies and National Instruments act to ensure consistency across the country. (Note that the primary difference between a National Instrument and a National Policy is that a National Instrument has the force of law, whereas a National Policy does not. A National Policy may be considered more akin to a guideline as it informs market participants and registrants of the manner in which a securities administrator may exercise its statutory discretionary authority or interpret a securities law.)
Provincial Policies	Provincial policies are particular to the individual province that issued the policy.

The mutual fund industry is a heavily regulated segment of the securities industry and is subject to comprehensive requirements, prohibitions and restrictions found in the various provincial and territorial securities acts, regulations and rules, National Instruments and the policy statements issued by the securities administrators. In addition, CIRO has the ability to set and enforce its own rules and policies. In this regard, CIRO has passed its own rules, by-laws, policies, staff notices, and bulletin guidelines regarding business conduct and other matters pertaining to the acceptable and expected behaviour of its registrants. Select rules will be discussed in more detail later in this chapter.

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REGULATORY CHANGE YOU SHOULD KNOW

On October 3, 2019, the CSA released its final amendments to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. This initiative, known as the Client Focused Reforms (the CFRs), made changes to the representative conduct requirements with the following intent:

- To better align the interests of securities advisers, dealers, and representatives (registrants) with the interests of their clients
- To improve outcomes for clients
- To clarify for clients the nature and terms of their relationship with registrants

These amendments came into force in two phases. The CFR amendments regarding conflicts of interest became effective on June 30, 2021. And amendments to Know Your Client (KYC), suitability, Know Your Product (KYP), and relationship disclosure information became effective on December 31, 2021. We discuss these topics in more detail below.

WHAT ARE SELF-REGULATORY ORGANIZATIONS?

The securities administrators granted CIRO the authority to regulate mutual fund dealers. CIRO is the self-regulatory organization (SRO) for mutual fund dealers across Canada, other than in Quebec, and is responsible for regulating all sales of mutual funds by its members (mutual fund dealers and their dealing representatives).

OBJECTIVES OF CIRO

The main objective of CIRO is to protect Canadian investors and ensure that they have the same level of protection regardless of which investment dealer or mutual fund dealer or dealing representative they deal with. CIRO has the power to enforce standards and conduct investigations and is responsible for the enforcement of its rules, by-laws, and policies *as* applicable to its members, their employees, and agents. Specifically, CIRO has the power to:

- assess and handle complaints
- investigate possible violation of its rules and policies
- conduct disciplinary actions
- impose fines and suspend rights and privileges of membership in CIRO

CANADIAN INVESTOR PROTECTION FUND (CIPF)

The primary role of the **Canadian Investor Protection Fund** (CIPF) is investor protection; its secondary role is overseeing the self-regulatory system. The secondary role provides a mechanism to help CIPF contain the risk associated with its primary role.

The CIPF protects eligible customers in the event of the insolvency of an investment dealer member or a mutual fund dealer member. It does not cover client losses that result from changing market values, nor does it insure accounts held at a bank or at any other firm that is not a CIPF member.

The CIPF is sponsored solely by CIRO and funded by dealer members.

All customer accounts are covered, either as part of the customer's general account or as a separate account. Accounts such as cash, margin, short sale, options, futures, tax-free savings accounts, and foreign currency are combined and treated as one general account entitled to the maximum coverage of $1 million. Separate accounts, such as registered retirement accounts, registered education savings plans, and trusts, are each entitled to the maximum coverage of $1 million unless they are combined with other separate accounts.

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For more information as to the limits of this protection please consult with your compliance department

AUTORITÉ DES MARCHÉS FINANCIERS

Quebec is unique in terms of the regulatory structure of its financial industry in that it has consolidated the regulatory framework governing the sector to simplify administration, both for consumers and market participants, through the establishment of a single regulatory organization, the Autorité des marchés financiers (AMF). The AMF ensures compliance with the regulatory requirements relating to the ability to distribute products and services. The AMF also issues an individual's or entity's right to practice.

Under the authority of the AMF, the Chambre de la sécurité financière (CSF) manages all the educational licensing and continuing education requirements in Quebec. The programs required for mutual fund licensing, as regulated by the securities administrators and CIRO, are also applicable in Quebec.

In October 2023, the government of Quebec and AMF announced their approval of a delegation of powers to CIRO, which represents a further step in the harmonization of the regulatory framework across Canada.

Upon implementation, CIRO will have the power to act as the organization that registers dealing representatives of a mutual fund dealer. They have also been delegated the power to conduct compliance examinations for mutual fund dealers who operate in Quebec.

Note that at the time of this writing, CIRO and the AMF were working together to form an implementation timeline for the delegation of powers. During this period of planning and transition, CIRO's regulatory requirements for the most part will not apply to the dealer's activities in the province of Quebec.

COMPLIANCE SUPERVISION

National Instrument 31-103 and applicable CIRO Rules provides that each mutual fund dealer must maintain a compliance system that provides assurance that the dealer and the individuals acting on its behalf comply with securities legislation and manage business risk in accordance with prudent business practices. The compliance system to be satisfactory requires that there be day-to-day supervision to provide a means of identifying cases of non-compliance, taking remedial action, and minimizing compliance risk in key areas of the mutual fund dealer's operations. Each branch or office of a CIRO dealer is required to have a person responsible for compliance and registered as a branch manager – often called a **branch compliance officer (BCO)** or compliance officer. Regardless of title, they have responsibility to ensure that dealing representatives deal fairly, honestly and in good faith with their clients, comply with both securities legislation and the dealer's policies and procedures and maintain an appropriate level of proficiency. The required level of proficiency can be established by completion of the Branch Compliance Officer's Course, and is maintained through monitoring compliance related developments.

Mutual fund dealers are required to maintain records of all compliance and supervisory activities undertaken by it and its partners, directors, officers, compliance officers and branch compliance officers as required by CIRO's Rules and Policies. In other words, as important as it is that the compliance function as contemplated by CIRO rules is carried out, such a function must also be thoroughly documented by the mutual fund dealer and its employees or agents.

Both National Instrument 31-103 and CIRO Rules require every mutual fund dealing representative has a duty to deal fairly, honestly and in good faith with their clients. Each mutual fund dealer should have materials available to its dealing representatives that outline the services and products the representatives can make available to their clients; dealing representatives should comply with their dealer's policies as well as the following general guidelines for dealing with clients.

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Rule No. 2 *Business Conduct*, in CIRO's Mutual Fund Dealer Rules (MFDR), sets out the standards applicable to all CIRO members and their respective dealing representatives. CIRO conduct rules are summarized in the points below. A mutual fund dealing representative must:

- deal fairly, honestly and in good faith to ensure that the clients' best interests always come first
- observe high standards of ethics and conduct in the transaction of business
- not engage in any business conduct or practice that is unbecoming or detrimental to the public interest
- be of such character and business repute and have such experience and training as is consistent with the standards acceptable to the industry

WHAT ARE THE REGISTRATION REQUIREMENTS?

Employees and agents who participate in the sale of mutual funds for a mutual fund dealer to the public must be registered with the appropriate provincial or territorial securities administrator as a mutual fund dealing representative in each province or territory in which their clients reside. An individual needs to be registered if they wish to be held out as being in the business of selling mutual funds or actually undertake such activity. Successful registrants are also referred to as approved persons within the financial services industry. It is generally accepted that, until registered as a dealing representative (or officer or director of a mutual fund dealer), an individual *may not* carry out the following actions:

- provide any advice or recommendations on mutual funds
- hand out a fund facts document, a mutual fund prospectus, AIF or annual or semi-annual financial report
- hand out an order form for mutual funds
- assist a client with the completion of an order form for mutual funds
- provide information about a specific mutual fund
- carry out "any act in furtherance of a trade," which may include marketing and advertising activities

An individual *may*, prior to registration being received:

- receive a redemption request for the purpose of processing the redemption
- receive a completed order form for the purpose of forwarding it to a registered salesperson
- provide basic information to current unitholders regarding their current holdings (e.g., net asset value for the fund, number of units held in the account, income, and capital gains distributions)
- refer clients to a registered mutual fund dealing representative

EDUCATIONAL QUALIFICATIONS

Before becoming eligible for registration as a mutual fund dealing representative, an applicant must pass an examination recognized by the applicable provincial or territorial securities administrator. Available courses which can be of assistance in passing a recognized examination include the Investment Funds in Canada (IFC) course and the Canadian Securities Course (CSC), offered by the Canadian Securities Institute (CSI), among others.

SUPERVISION AND TRAINING FOR NEW DEALING REPRESENTATIVES

All mutual fund dealing representatives are required to complete a training program within 90 days from the day that they first start acting as a dealing representative. They must also be closely supervised for six months unless the dealing representative has completed a training program and supervision period, in accordance with CIRO's MFDR Rule 1.2, with a previous dealing member of CIRO, or was registered to trade in mutual funds prior to the date that Rule 1.2 came into effect.

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DID YOU KNOW?

CIRO implemented a continuing education credit program for approved persons effective December 1, 2021.

Participating approved persons are subject to a two-year continuing education cycle that requires 30 credits.

Participants who are approved persons, but not mutual fund dealing sales representatives (e.g., registered or designated as either Chief Compliance Officer, Ultimate Designated Person, Branch Manager, Alternate Compliance Officer or Alternate Branch Manager) are required to take 10 credits in each cycle

Visit www.ciro.ca for more information.

THE REGISTRATION PROCESS

Registration varies from province to province or territory, but the general process is as follows:

1. The candidate for registration successfully passes the proficiency examination for the course.
2. The sponsor of the proficiency course notifies the candidate of the examination results.
3. The candidate (through his or her dealer) files a registration application and the appropriate fee with the provincial or territorial securities administrator. Additional documentation may also be required, depending on the jurisdiction. One is registered only once notice has been received from the applicable securities administrators.
4. To remain a registered dealing representative, the representative or his/her dealer must pay a fee annually within specified time frames. However, it is not necessary to rewrite the proficiency course examination. It is important to note that if an individual is not registered within three years of successful completion of the proficiency examination, or within three years of termination or suspension of the individual's registration, there is a general requirement that proficiency requirements must be met again, unless an exemption is available or obtained. There currently are formal continuing education requirements.
5. The registered dealing representative and the registrant's dealer must notify the appropriate securities administrator promptly in writing within five business days (10 days in Quebec) of any changes in specified information provided on the dealing representative's registration application, including:
   - branch transfer or change in address
   - change of name (state reason)
   - disciplinary action of a professional body or regulatory body
   - termination of employment/registration (state reason)
   - charged with a criminal offence
   - personal bankruptcy (Ontario and Quebec)
   - civil judgment or garnishment

In most provinces and territories, you may not advertise the fact that you are registered with the securities administrator as a mutual fund dealing representative nor imply that the securities administrator in any way has approved of your actions.

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THE NATIONAL REGISTRATION DATABASE

An application for registration is filed electronically on the **National Registration Database** (Form NRD 33-109F4), with the appropriate fee. National Instrument 31-103 sets out all the requirements for initial and continuing registration. These requirements include, but are not limited to, the following:

- mutual fund dealing representatives may only be employed or sponsored by a single mutual fund dealer.
- mutual fund dealing representatives are not permitted to carry on other forms of employment without the prior approval of the appropriate securities administrator and SRO of which their firms are members.

Other forms of employment are often referred to as outside activities or outside business activities. It is not uncommon for a mutual fund sales representative to carry an additional license (e.g., an insurance or mortgage broker license) that allows them to provide other financial services with the investing public. However, because of the potential for client confusion or conflicts of interest, registrants must declare any additional outside activity or employment to their dealer for proper analysis and approval before engaging in them. Additionally, business titles such as financial planner or designations that claim special expertise with elderly investors could be perceived as misleading to clients. They must therefore undergo additional scrutiny at the dealer and regulatory level. Applicants must also complete a detailed registration application setting out details of their past businesses, employment, and conduct, and agree that the securities administrators may obtain a copy of their criminal record, if one exists, from the RCMP.

The registration application asks questions about the applicant and any companies with which the applicant has been associated, including:

- any disciplinary actions against the applicant with regard to any government-issued license to deal in securities or with the public in any other capacity requiring registration or licensing
- any disciplinary actions regarding an approval by any securities commission, SRO or other similar regulatory body or professional body
- any past criminal convictions or current charges or indictments
- any bankruptcies or proposals to creditors
- any civil judgments or garnishments

DUAL EMPLOYMENT

Many provinces have issued policy statements permitting persons to be dually registered (known as **dual employment**) as mutual fund dealing representatives and life insurance agents.

A mutual fund representative who works for or is sponsored by a member of CIRO may have, and continue in, another gainful occupation, provided that:

- CIRO and the securities regulatory authority in the jurisdiction do not prohibit from engaging in such activity
- the representative's dealer is aware and approves of the other occupation
- the representative obtains written approval from the dealer prior to engaging in the activity
- the other gainful occupation must not bring CIRO, its members or the mutual fund industry into disrepute
- clear written disclosure is provided to clients that any activities related to the other occupation are not the business or responsibility of the dealer

The dealer must establish and maintain procedures to ensure continuous service to clients and to address any potential conflicts of interest. CIRO Rules indicate that all "securities related business" must be conducted through the member, with exceptions for the sale of deposit instruments not on account of the dealer member and the activities of bank employees conducted in accordance with the Bank Act. "Securities related business" means any business or activity that constitutes trading or advising in securities in any jurisdiction in Canada.

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TRANSFER AND TERMINATION OF REGISTRATION

A dealing representative's registration is automatically suspended as soon as he or she ceases to be employed or sponsored by a mutual fund dealer (or other type of registered dealer). The dealer must notify the applicable securities administrator of the **termination** of the employment and the reason for termination within 5 business days. Before a dealing representative's registration can be re-activated, notice in writing must be received by the applicable securities administrators from another registered dealer of the employment or sponsorship of the dealing representative by that other dealer within 6 months.

The re-activation of the registration must be approved by the securities administrators before a dealing representative can act on behalf of his or her new dealer. If the securities administrator(s) does not receive a request for reactivation of the dealing representative's registration and its transfer to another dealer within the permitted period of time, the registration will lapse. This period is generally six months. If the registration lapses the dealing representative must reapply for registration.

Termination of employment or sponsorship by a registered dealer includes transferring to another branch or office of a registered dealer in another province or territory. If a dealing representative transfers to another province or territory, notice using the National Registration Database must be provided to the securities administrator in the new province or territory. Under no circumstances may a person sell mutual funds without having received confirmation of registration from the appropriate securities administrator, or continue to sell funds when registration has been suspended, terminated, or lapsed for any reason.

Case Study | Suitable for Sunil: Proper Conduct is About More Than the Right Products
(*for information purposes only*)

Rania is an account manager at a major Canadian bank. She recently passed her IFC exam and is excited about providing clients with investment advice. Sunil is a client at Rania's bank. He recently received a $5,000 bonus from his employer. Sunil has his investment portfolio at the bank. He visits Rania's branch on his lunch break seeking investment advice for the new funds. He is referred to Rania.

During the meeting, Rania discusses Sunil's goals and reviews his investment objectives, time horizon and risk tolerance. When he first set up his investment account, Sunil was a conservative investor, as his investment knowledge was very basic and he wanted to learn more before taking on more risk in his portfolio. Since then, Sunil has increased his investment knowledge, and is now more comfortable with risk and the long-term benefits provided by the growth potential of equities. After a lengthy discussion, Sunil and Rania agree that he is now a balanced investor.

Rania recommends that Sunil change his existing portfolio from a conservative profile to a balanced one, and that he contributes his $5,000 to the new balanced portfolio. Sunil is very pleased with the recommendation and is impressed with Rania's investment knowledge. Rania does not yet have access to the bank's investment platform, so she enlists the assistance of her peer, mutual fund representative Kumar, to execute the trade.

Rania explains the situation to Kumar, and Kumar verbally confirms Sunil's comfort level with Rania's recommendation. Satisfied, he executes the trades, switching the existing funds and adding the new funds to the balanced portfolio. Sunil signs the trade confirmation documents and departs.

Later that day, the branch compliance office (BCO), Terrance, calls Kumar to his office. He notes that the trades for Sunil have been flagged for being in conflict with the client's KYC, which shows him as a conservative investor who has purchased a balanced portfolio. Kumar explains that he confirmed the client's profile that was established by Rania and that the client signed the trade confirmation that clearly showed the switch to the balanced portfolio and the new investment into the same portfolio.

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Case Study | Suitable for Sunil: Proper Conduct is About More Than the Right Products
(*for information purposes only*)

Terrance admonishes Kumar. First, Kumar did not update the client's KYC information and have the client sign the appropriate form that confirms the update. Second, Kumar did not conduct the investment discussion with the client himself, only taking Rania's word for it that the discussion was appropriately thorough as per proper procedures. He advises Kumar to update the client's KYC and to have the client return immediately to sign the form.

Terrance then meets with Rania and admonishes her for providing investment advice and making mutual fund recommendations without being registered to do so. Rania states that she did everything properly, conducting a thorough review with the client. She notes the client was happy with her recommendation. Terrance agrees that Rania completed the correct steps and that the mutual fund recommendation was appropriate for the client. However, despite passing the IFC exam, she is not yet registered to sell mutual funds, and therefore it was not appropriate for her to provide any specific investment advice to the client and to make mutual fund investment recommendations.

HOW DO REPRESENTATIVES AND DEALERS MEET THE KNOW YOUR CLIENT RULES?

On October 3, 2019, the CSA introduced amendments to NI 31-103 with reforms to the requirements regarding conflicts of interest, KYC, suitability, KYP, and relationship disclosure information. These reforms are collectively referred to as Client Focused Reforms (CFRs). The CFRs are a series of enhancements to existing security laws whose main purpose is to raise the standard of conduct across the securities industry, thereby ensuring that registered dealers and their dealing representatives always act in the best interest of the client. The CSA developed the CFRs based on the concept that client interests must come first in the client-representative relationship, so that representatives who are in an advisory role (i.e., provide investment recommendations to clients) make suitable recommendations to their clients. In addition to increased assessment and disclosure requirements for conflicts of interest and relationship disclosure information, the CFRs amend the current KYC requirements, upgrade suitability determination, and create a formal KYP requirement that calls for more in-depth product knowledge assessment and delivery at both the dealer and client-advisor relationship level. These changes support what the regulators refer to as enhanced suitability determination obligations.

CIRO actively participated with the CSA in the development of the CFR amendments and made changes to their rules, policies, and guidance to align with the amendments and ensure a consistent and further harmonized approach to securities regulation in Canada.

Applying due diligence to ensure that each investment recommendation is appropriate for the client is a fundamental industry obligation. This is the suitability obligation and for regulators, it is critical that representatives appreciate, apply, and thoroughly document the components of suitability.

The CFRs were phased in during 2021. The key amendments and reforms introduced by the CFRs include a conflict of interest amendment that came into force on June 30, 2021:

- **Conflicts of Interest:** The amended rule requires firms and individuals to address material conflicts of interest in the best interest of the client. The CFRs outline how these conflicts are expected to be identified, documented, addressed, and disclosed.

The remaining amendments came into force on December 31, 2021:

- **Know Your Client**: The CFRs set out an expanded list of information representatives must collect to meet their KYC obligations. The basic premise is that if you don't really know your client, how can you recommend a suitable investment strategy? Representatives must also take reasonable steps to obtain the client's

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confirmation of the accuracy of any information collected. The amendments also have an expectation that client information be reviewed at minimum intervals (e.g., every 36 months) for currency and updated if the representative becomes aware of a significant change.

- **Suitability:** The CFRs highlight that representatives must put client interests first when making a suitability determination. Along with KYC and KYP, representatives are expected to have appropriate information to determine whether an investment is suitable for a client and puts the client's interest first.
- **Know Your Product:** The new KYP obligation requires firms to take 'reasonable steps' to understand any securities that are purchased and sold for, or recommended to, their clients. The CFRs require firms to have policies and procedures in place to properly assess, approve, and monitor all securities they make available to clients.
- **Relationship Disclosure:** The CFRs expand the disclosure requirements to include letting clients know about potentially significant items related to investment products being offered, such as costs.

The following sections focus on these rules in greater detail.

CONFLICTS OF INTEREST

As part of the CFRs, the CSA proposed changes to conduct requirements to better align the interests of registrants (i.e., mutual fund sales representatives) with the interests of their clients. The goal is to improve outcomes for clients and make clearer to them the nature and terms of their relationship with you as their trusted representative.

Mutual fund dealers must develop and maintain policies and procedures to identify, disclose, and address existing and potential material conflicts involving clients. For any registrant or service provider of end clients, a conflict of interest will arise in any situation where a provider of a product or service has an interest that overlaps or diverges from that of the client being served.

Effective June 30, 2021, Part 13 of NI 31-103 required registered firms and individuals to identify, address, and disclose material conflicts of interest. You must address such conflicts in the best interests of your clients and provide guidance to explain when a conflict of interest is considered material.

To comply with NI 31-103, you must avoid material conflicts of interest if there are no appropriate controls available in the circumstances that would be sufficient to otherwise address the conflict in the best interest of the client.

The CFR changes to the conflict provisions introduce several requirements to the existing conflict rules, as noted in NI 31-103. They can be summarized as follows:

- Both firms and individual registrants acting on behalf of their firms must go through a process to identify material conflicts of interest that currently exist between a client of the firm or an individual acting on behalf of the firm.
- The material conflicts must be addressed in the best interests of the client.
- To the extent that such conflicts cannot be addressed in the best interests of the client, the material conflicts must be avoided.
- The firm must disclose any material conflict of interest that may impact a client at the time of account opening, or in a timely manner if the conflict is identified at a later time.

For each conflict identified, the disclosure provided to clients must be prominent, specific, and written in plain language outlining the following matters:

- The nature and extent of the conflict in question.
- The impact and risk it may pose to the client.
- The way in which it has been or will be addressed.

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The CFR amendments specifically point out that it is not sufficient for a registrant to rely solely on verbal disclosure as a means to satisfy its obligations under the conflict provisions. Prompt, accurate client-advisor meeting summary notes should be maintained in writing as evidence that these requirements have been adequately administered to the client in a timely manner. Additional guidance regarding conflict-of-interest compliance can be found in the NI 31-103 Companion Policy and on the CIRO website. Finally, individual registrants have similar obligations to those of the firm and must report conflicts to their firm promptly.

KNOW YOUR CLIENT

KYC and suitability are two of the three pillars of registrant expectations (the other is the KYP rule). These concepts are interdependent. If you neglect even one, you may not be fully compliant with regulatory expectations. For example, if you do not fully know your clients or understand a particular product, you will find it difficult to make a suitable trade or product recommendation. Understanding the interplay of these "golden rules" of the securities industry (that is, KYC, KYP, and suitability) is critical.

The CFRs add to the existing KYC requirements and clarify the KYC information representatives must gather in order to meet suitability obligations. Required KYC information will include the client's:

- Personal circumstances (not limited to financial circumstances)
- Financial circumstances (take reasonable steps to obtain a breakdown of client income, liquid assets, fixed assets, and liabilities)
- Investment knowledge (assess the client's past investment experience and the types of the products the client has held)
- Investment needs and objectives
- Risk profile (guidance clarifies that this includes both the customer's risk tolerance and their risk capacity)
- Investment time horizon (assessed with consideration of the client age, life cycle, and time available to invest)

DID YOU KNOW?

As indicated in Chapter 4, a client's risk profile requires an understanding of their willingness to accept risk (risk tolerance) and their ability to endure a potential financial loss (risk capacity). According to NI 31-103, a client's risk profile should reflect the lower of their risk tolerance and their risk capacity.

RISK PROFILE = LOWER of…

- The clients' willingness to accept risk, or
- The clients' ability to endure financial loss

No single question can determine a client's willingness to accept risk or endure financial loss. Behavioural-based interview questions and questionnaires can help to pinpoint how the client defines risk and how much they are willing to accept risk. The answers to a behavioural-based questionnaire, by applying a scoring system, can be used to determine a client's risk profile.

The CFRs also change the requirements with respect to confirming KYC accuracy and timeliness. These changes will require registrants to:

- Take reasonable steps to obtain client confirmation that their KYC information is accurate
- Keep KYC information current by updating it when becoming aware of a significant change.
- Review KYC information with the client every 36 months even if the registrant hasn't interacted with the client.

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SUITABILITY

Making a suitability determination is part of your fundamental obligation to deal fairly, honestly, and in good faith with your clients. In addition, you must always put the client's interests first, which means ahead of your own interests, such as higher compensation or other incentives for making a particular recommendation. However, it is also important to note that conducting a suitability determination does not guarantee a particular client outcome.

Typically, when a client account is offside, either the recommended product was unsuitable or the KYC process was not robust enough to obtain the fundamental KYC information to determine suitability. In these instances, the remedy is not to automatically update the client KYC allocations. The representative must redo the KYC process with the client and scrutinize the aspects that caused the inconsistency. As mentioned previously, investor profile questionnaires found on fund company websites may prove useful for representatives in need of different ways to pose questions that help determine KYC.

A suitability determination must be made before an investment action is taken. Investment actions include the following:

- Account openings
- Purchases and sales
- Deposits, exchanges, or transfers
- Recommendations
- Any other investment actions including a recommendation or decision to continue to hold investments

Suitability cannot be determined without first complying with KYC and KYP requirements. A suitability determination must also take the following into account:

- The impact of the action on the client's account, including the concentration of investments within the account and the liquidity of such securities.
- The potential and actual impact of costs on the client's return on investment.
- A reasonable range of alternative options available to the representative through the representative's firm.

IMPACT OF COSTS

When making investment recommendations, you must consider the potential and actual impact of costs to a client's account. Costs typically include all direct and indirect costs, fees, commissions, and charges including trailing commissions, and any other indirect compensation that may be associated with the purchase, sale, or holding of an investment. Costs may also include bid/ask spreads.

These costs can have a significant impact on a client's return over time. You must put your client's interests first when selecting from multiple and otherwise suitable options available to the client and document the reasons for the selection. Your recommendations and advice must meet a standard of reasonableness and must be adequately substantiated with an appropriate level of detail in your summary meeting notes. Verbal delivery regarding the impact of costs is *not considered* sufficient disclosure from a regulatory perspective.

REASONABLE RANGE OF ALTERNATIVES

When making a recommendation or decision based on a suitability determination (for example, purchase of shares or an investment fund), you must also consider a reasonable range of alternative recommendations or decisions available at the registrant's firm at the time the suitability determination is made. What constitutes a "reasonable" range of alternatives in this context depends on the particular circumstances, including the securities or services being offered, the skill and proficiency of the registrant, and the client's specific circumstances.

You must exercise professional judgment when opting for one recommendation over another and be able to provide your analysis and rationale for that recommendation. You should be prepared to defend your choice in a manner

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that supports the product recommendation or service to the client. All of the factors assessed should be clearly documented to support your recommendation, and a copy of the range of alternatives presented to the client should be maintained in the client file as evidence of the discussion.

CLIENT'S BEST INTEREST

After complying with these requirements, you should have sufficient information:

- to determine whether an investment action is suitable for a client, and
- to put the client's interests (vs. the interests of the representative) first.

Even where you have made an investment recommendation based on detailed research and have reasonably determined that the recommendation is suitable, you must also ensure that the client's interests are prioritized over your own. For example, you should always follow your firm's policies and recommended investments even if you received more compensation for recommending an alternative product.

OTHER CONDITIONS THAT TRIGGER SUITABILITY

In addition to taking specific investment actions (as defined above) for a client, other trigger events may also require a suitability determination. All mutual fund representatives generally recognize that they should be routinely reassessing suitability where market conditions dictate. These more "informal" opportunities to speak with the client may arise frequently, and when they do, you should note these conversations in the client file.

As noted in an earlier section, an "investment action" includes account opening as well as decisions to buy or sell positions in a client account, depositing, exchanging, or transferring securities for a client's account, and taking any other investment action for a client or making a recommendation or decision to take any such action.

Other triggering events include:

- A new representative is designated as responsible for the client's account.
- The representative becomes aware of a change in a security in the account that could result in the security or account not satisfying the suitability determination requirement.
- The representative becomes aware of a change in KYC information that could result in the security or the client account not satisfying the suitability determination requirement.

CIRO rules also consider a triggering event to occur when securities are received into or delivered out of the client's account by way of deposit, withdrawal or transfer-in/out. In these situations, a representative must review a client's account within a reasonable time, including its securities, to determine suitability.

CLIENT DIRECTED TRADES

Representatives are responsible for suitability for both solicited and unsolicited trades. Where you receive an **unsolicited order** that is unsuitable in relation to the client's objectives, risk tolerance, and other circumstances, it is not sufficient to merely mark the order as unsolicited. You should take appropriate measures to deal with the unsuitable order. The extent of this obligation depends in part on your relationship with the client.

Appropriate measures to deal with an unsuitable order may include providing the client with cautionary advice or recommending changes to other investments within the account. The cautionary advice should be documented, along with confirmation of the client's instructions to proceed despite the advice provided (for example, asking the client to provide written instructions that also acknowledge the caution provided). If the unsolicited action is contrary to the client's recorded KYC information, the KYC information may need to be updated (keep in mind that it is inappropriate to update the KYC in an effort to justify the suitability of an order that is otherwise unsuitable if there are no changes in the client's investment objectives, risk profile, or other relevant circumstances). In some circumstances, it may be prudent to simply refuse the trade.

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The CFRs contemplate this type of situation and codify regulatory expectations in this regard. Where a representative receives instructions that do not align with the representative's suitability obligation as described, the representative may carry out the instructions only if they have informed the client that the trade is not suitable and recommended an alternative course of action that is suitable.

If you are unsure of how to deal effectively with an unsuitable unsolicited order, you should consult your supervisor or compliance department to understand the firm's internal procedures for dealing with such situations and clearly document the outcome of this process in the client file.

KNOW YOUR PRODUCT RULE

Equally important in making a suitability determination is an understanding of the product being recommended – how it is constructed, its features, risks, and costs, and a general idea of how it is likely to perform in various market conditions. This companion obligation of the KYC rule is referred to as the KYP rule.

Clients have a right to know what they are agreeing to purchase and a rightful expectation that their representatives know what they are selling. Without this knowledge, you can neither assess suitability nor explain the product's features and risks. And if you are unable to explain the product, the client, arguably, will not be able to give proper instructions to buy or sell the product in question.

Under the CFR amendments, all new fund recommendations provided to clients must undergo a more rigorous KYP assessment at both the dealer and representative level. Specifically, dealers must:

- Take reasonable steps to assess and understand products that are transferred into the dealer from another registrant (representative or dealer)
- Monitor their approved shelf of products for significant changes
- Provide subsequent and ongoing reviews of any changes

Correspondingly, representatives must take reasonable steps to understand the products they recommend to clients by examining the product structure, features, risks, initial and ongoing costs (embedded fees), the impact of those costs to product performance. They must be able to explain these dynamics to the client at a level consistent with the client's investment experience and product history.

DID YOU KNOW?

CIRO amended its rules in line with the CSA's CFR initiative. Specifically, amendments apply to MFDR Rule 2.2.5 (Know Your Product) and 2.2.6 (Suitability Determination), and corresponding changes made to Rule No. 200 (Minimum Standards for Account Supervision). For additional details, go to www.ciro.ca.

VULNERABLE CLIENTS

Vulnerable clients may include persons with an illness, impairment, or disability, or a limitation due to the aging process (e.g., senior citizens). Representatives need to have a heightened sensitivity in their dealings with vulnerable clients. With respect to elderly clients, many will rely on their investments to supplement retirement income, investments that will be difficult to recover from financial losses given the client's shorter time horizon.

Some representatives, however, rather than protecting these clients, take advantage of the fact that vulnerable clients may have complete reliance on them on financial matters. This may be due to the client's limited investment knowledge, a long-standing relationship, and a change in circumstances (i.e., becoming a widow). Sometimes that vulnerability may be the result of cultural issues that give deference to the representative.

Determining who is considered "vulnerable" will ultimately drive the application of any additional policies and procedures. Because it is not just elderly clients who are vulnerable, you must consider how to approach any client who appears to be in distress or in need of assistance. It is for these reasons that the ability to observe and detect

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a change in long-standing client behaviour is key to being able to support clients who may fall into this category. A few common warning signs of diminished mental capacity during a client-representative interaction may include memory loss, forgetting simple previous instructions, increased difficulty completing forms, confusion with previously understood basic financial concepts, or a reduced ability to solve everyday math problems.

The most common types of infractions related to vulnerable clients include:

- Unsuitable investment advice, particularly the use of higher-risk investments to boost client income.
- NAAF updates to justify trading.
- Investment objectives that benefit the estate instead of the client.
- Accepting trading instructions for a client's account from a family member without receiving authorization from the account holder or an appropriate power of attorney.
- Accepting loans or gifts from clients.
- Accepting executor or trustee power over clients.

The recent CSA and CIRO regulatory initiatives regarding vulnerable clients are summarized below:

- Representatives are required to take reasonable steps to add a trusted contact person (TCP) to a client file, including how this person can be contacted and in what circumstances they may be contacted. The TCP requirements state as follows:
  - A TCP may be a close friend or family member.
  - A client may appoint more than one TCP.
  - A client may revoke a TCP at any time.
  - A client's TCP information must be reviewed each time their KYC is updated.
- In carrying out enhanced KYC, KYP, and suitability determinations, representatives must pay particular attention to vulnerable clients.
- Representatives must be able to identify red flags that may indicate diminished capacity, financial abuse, or misuse of a power of attorney.
- In some circumstances representatives or their dealer can place temporary holds on the purchase, sale, withdrawal, and transfer of cash or securities from a client's account.
- Special considerations for communicating with vulnerable clients (particularly during onboarding of a client) or marketing to these clients.
- From the dealer's perspective, providing policies and procedures related to escalation and complaint handling that best fits with the dealer and its client base, as well as a training program to help representatives protect vulnerable clients (and the dealer).

THE ROLE OF KYC INFORMATION IN OPENING AN ACCOUNT

Know your client information is critical for opening accounts and taking orders. Information about individuals with a financial interest in an account, information about changes in the client's circumstances, and requirements relating to anti-money laundering and anti-terrorist financing laws must be obtained.

FINANCIAL INTEREST IN AN ACCOUNT

The investment experience and knowledge of all individuals who have trading authority over the account should be obtained, as well as KYC information for anyone with a financial interest in the account, such as joint account holders and beneficiaries of trusts and trust accounts for children. With a trust, the trustee has trading authority over the account, and therefore his or her investment experience and knowledge should be obtained, as well as the

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KYC of the beneficial owner of the account. For spousal RRSPs, the contributing spouse does not have a financial interest in the account, so KYC information is required for the non-contributing spouse only.

CHANGES IN CIRCUMSTANCES – UPDATING CLIENT INFORMATION

CIRO rules require that the dealer or representative must take reasonable steps to keep the client's KYC information current, including updating the information within a reasonable time after becoming aware of a material change in client information, and must maintain evidence of any client instructions regarding any material changes. All such changes must be authorized by the client and approved by the individual responsible at the dealer for approving new client accounts.

When approving material changes, branch managers should review the previous KYC information to determine if the change appears reasonable, and ensure that material changes have not been made to justify trades that would be considered unsuitable or would disregard the principle of putting the client's interests first. CIRO rules require that at least annually, the mutual fund dealer in writing, request each client to notify them if the KYC information previously provided to the dealer has materially changed. As indicated earlier, a representative must review KYC information with the client at least once every 36 months even if the registrant hasn't interacted with the client. Ultimately, having a well-documented and up-to-date client file will only benefit the registrant and the mutual fund dealer. If during normal interactions with a client the representative has discerned a fact that is suggestive of a material change, this should be well documented and to the extent required, the client account should be appropriately updated.

WHAT ARE THE STEPS IN OPENING A MUTUAL FUND ACCOUNT?

The Mutual Fund industry is fortunate to conduct its business in a self-regulatory environment, but the primary responsibility for self-regulation rests with each mutual fund dealing representative. The first step in ensuring compliance to the rules and policies that govern the mutual fund business is the accurate completion of documentation when opening new accounts. Maintaining accurate and current account documentation will allow the dealing representative and the supervisory staff at the mutual fund dealer the necessary tools to perform a suitability assessment of the investments in the client account. As noted above, in addition to accurate account documentation (which is essentially the contract between the mutual fund dealer and the client) the mutual fund dealing representative should also document and maintain detailed notes regarding the regular and routine interactions with the client.

RELATIONSHIP DISCLOSURE

Securities regulation requires that for each new client account opened, the mutual fund dealer must provide the client with written "relationship disclosure information." This disclosure includes all the information that a reasonable client would consider important about their relationship with the mutual fund dealer and the dealing representative. Relationship disclosure information may be provided in a standalone document, or it may be included in the account opening documentation.

Regardless of the manner in which the relationship disclosure information is provided to the client, it must include the following information:

- The nature of the client account and the advisory relationship
- The products and services offered by the dealer, as well as any limits or restrictions, including whether the dealer will primarily offer proprietary products
- A description of the dealer's procedures regarding the receipt and handling of client cash and cheques
- A statement that the dealer must determine that all recommendations and actions are suitable for the client and put the client's interest first

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- A general explanation of the circumstances under which a dealer or approved person might place a temporary hold
- A definition of the various terms used in the collection of KYC information and an explanation of how the information will be used
- A description of the circumstances under which a dealer or approved person might disclose information about a client or client account to a trusted contact person
- A description of any benefits received by the dealer or representative from a third party related to the client's purchase or ownership of an investment through the dealer
- A disclosure of the operating and transaction charges the client may be required to pay, and a description of the general impact on the client's return from management expense fees and other ongoing fees
- A general explanation of how investment performance benchmarks might be used to assess performance
- A description of the content and frequency of reporting for the account (e.g., the expected date of delivery for the quarterly official account statement, cost and compensation report, and performance report)

Relationship disclosure provided in a standardized document should be approved by the dealer's head office and/or branch office. Mutual fund dealers are also required to maintain evidence that relationship disclosure has been provided to the client. If relationship disclosure information is incorporated into account documentation and it is client-signed, maintaining a copy of the signed account documentation is sufficient evidence. In the event that the dealer chooses to provide relationship disclosure as a standalone document, the dealer may evidence client delivery by requesting a client signed acknowledgement or by maintaining copies of disclosure documents sent to the client in their respective file at the dealer. It is recommended that, for relationship disclosure documents that are not client-signed, the dealing representative maintain detailed notes of client meetings and discussions evidencing that the relationship disclosure information has been provided.

As with any client account documentation, it is expected that when there is a significant change in the relationship disclosure information previously provided to the client that the dealer will take reasonable steps to notify the client of the change in a timely manner.

NEW ACCOUNTS

The first step in satisfying the KYC Rule is to establish the client's account in accordance with securities regulation as well as the policies and procedures established at the mutual fund dealer. Each new client account accepted by the dealing representative should be reviewed and approved by the person responsible at the dealer for approving new accounts within a reasonable time frame. Account numbers should not be assigned until the client's full legal name and address is confirmed.

In addition, it is also expected that a New Account Application Form is completed for each new client account. As an aside, it is never acceptable conduct to permit or suggest to a client that any form required by the dealer be executed by the client "in blank", to be completed by the mutual fund dealer representative at a later time. This is not considered acceptable conduct and is most likely to result in enforcement action being taken against the representative. Typically, the New Account Application Form will include the necessary KYC information. If the KYC information is not included in the New Account Application Form, KYC information must be captured on a separate form. Regardless of how the KYC information is documented it must include, among other things, the client's personal information, financial information, risk tolerance, investment objectives, and disclosure of whether the client is an insider or significant shareholder of a public corporation. The information collected regarding risk tolerance and investment objectives should be sufficiently precise to enable the dealer and the dealing representative to meet their suitability assessment obligations. A detailed description of the New Account Application Form is described in the following section entitled "The New Account Application Form (NAAF).

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THE NEW ACCOUNT APPLICATION FORM (NAAF)

The application form or account opening form, often referred to as the **New Account Application Form (NAAF)**, is used to open new accounts and may also be used to record changes to the personal information (KYC and other information) in a client's file. The NAAF represents the first opportunity for the dealer and representative to carefully and clearly document the relationship with the client. For these reasons, this "discovery process" should be organized in such a fashion to at minimum capture the required information as expected by CIRO as well as any other information that be necessary in order to demonstrate that the dealer and representative know their client. The order form, which is sometimes incorporated into the account opening form, is used to subscribe for units or shares of a mutual fund. Typically, both the account opening form and the order form are produced or approved by the mutual fund dealer's head office, and dealing representatives must use them without alteration. It is both permissible and useful, however, to make appropriate notations on these forms or elsewhere in a client's file for record-keeping purposes.

The order form is the key document in the sales and compliance chain. A completed order form is only the customer's offer to purchase mutual funds, however. This offer need not be accepted by the mutual fund, although refusal is uncommon. A Branch Compliance Officer should refuse to open an account or process an order for a client who has not completed all of the "KYC" information or who refuses to supply information that is required under CIRO MFDR Rule 2.2.1.

Another common reason for refusing an order is that the purchaser is a frequent trader. **Frequent traders** buy and sell mutual fund units actively, sometimes holding positions for as little as one day. With no-load funds, frequent traders can often buy and sell without incurring any costs. The cost of the trades to the dealer, the fund company, and the mutual funds in question can be significant in terms of both time and money. Many funds have adopted short-term trading fees to counter the practice of frequent traders.

The account opening should be done in person unless unique circumstances warrant otherwise (e.g., unavoidable covid lock-down). However, depending on the specific dealer's policies the initial order and subsequent transactions may be processed by telephone, by the toll-free line or electronically (Internet or fax).

All information about clients and client transactions are confidential and subject to the mutual fund dealer's privacy policy and related obligations. Neither the information obtained about the client nor the contents of the client's file may be disclosed except with the client's permission or by order of a securities administrator or other authority or as may be required to comply with the client's instructions. A client cannot be required to consent to allowing the disclosure of his or her personal information as a condition of accepting the account, except where such information is reasonably necessary to provide the specific product or service that the client has requested.

COMPLETING THE NEW ACCOUNT APPLICATION FORM

The structure and format of order forms vary among mutual fund dealers, although their content is very similar. Remember, only a registered dealing representative should help a client complete the non-administrative/clerical portions of the order form.

There is no standard prescribed account application form, however, CIRO provides guidance for new account application, design, and delivery on their website (www.ciro.ca). Figure 17.2 shows a sample New Account Application Form (NAAF).

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Figure 17.2 | Sample New Account Application Form

SAMPLE NEW ACCOUNT APPLICATION FORM

(To be completed by Approved Person)

1. a) Name: Mr. / Mrs. / Ms. _____ (Please Print)

Address: _____ Apt/Number Street

Address: _____ City Province Postal Code

Contact: Home (_____)_____
Business: (_____)_____
Other: (_____)_____
Fax: (_____)_____
Email: _____
Date of Birth: _____/_____/_____ dd / mm / yy
SIN Number: _____ -_____ -_____

b) IF APPLICABLE

Name: Mr. / Mrs. / Ms. _____ (Please Print)

Address: _____ Apt/Number Street

Address: _____ City Province Postal Code

Contact: Home (_____)_____
Business: (_____)_____
Other: (_____)_____
Fax: (_____)_____
Email: _____
Date of Birth: _____/_____/_____ dd / mm / yy
SIN Number: _____ -_____ -_____

2. CLIENT'S EMPLOYER

Name: _____ Type of Business: _____
Address: _____ Client's Occupation: _____

3. FAMILY INFORMATION

Spouse's Name: _____ Number of Dependants: _____
Spouse's Occupation: _____

4. Will any other person or persons:

a) Have trading authorization in this account? Yes ____ No ____ *(If Yes provide particulars)*
(Trading Authorization held by a third party for the client's account must be documented)
_____

b) Have a financial interest in this account? Yes ____ No ____ *(If Yes provide particulars)*
_____

5.

INVESTMENT KNOWLEDGE		RISK TOLERANCE		INDIVIDUAL INCOME	
Extensive	____	Low	____	Under $20,000	____
Moderate	____	Medium	____	$20-50,000	____
None	____	High	____	$50-100,000	____
				Over $100,000	____
INVESTMENT OBJECTIVES		**TIME HORIZON**		**HOUSEHOLD NET WORTH**	
Income	____	1 – 3 yrs.	____	Under $25,000	____
Growth	____	4 – 5 yrs.	____	$25-50,000	____
– short term	____	6 – 9 yrs.	____	$50-100,000	____
– long term	____	10 yrs. or more	____	$100-250,000	____
Balanced	____			Over $250,000	____

6. LEVERAGING

The client has been provided with a leveraging disclosure document in compliance with MFDA Rules. Yes ____

7. BANKING INFORMATION

Bank Name: _____ Account Number: _____
Branch Address: _____ Transit Number: _____

8. Client Signature: _____ Date: _____
Salesperson Signature: _____ Date: _____
Designated Officer, Director, or Branch Manager Approval: _____ Date of Approval: _____

9. CLIENT IDENTIFICATION:

1. _____ 2. _____

10. UPDATES TO CLIENT INFORMATION:

_____

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The first step as a dealing representative is to obtain a client's personal data including the following:

Full Legal Name	This must be obtained in full, without abbreviations.
Permanent Address	This is the address in full of the client's permanent residence, which must be obtained even if the client wishes to use a different mailing address.
Mailing Address	This is the client's preferred mailing address. P.O. Boxes and RR numbers are acceptable mailing addresses only in rural areas.
Social Insurance Number (SIN)	Requesting the SIN is a legal requirement. For non-registered accounts, if the client refuses to supply the SIN, you should indicate in writing on the account form that the client "refused to supply the SIN number." The order may be executed and the account opened even if the SIN number is not obtained. You must make a reasonable effort to obtain a client's SIN for tax purposes. Failure to make such an effort may render you liable for a $100 fine per infraction. You may advise clients that if they fail to provide their SIN, they may be liable to the Canada Revenue Agency (CRA) for a $100 fine. A SIN number is required for all registered accounts; without a SIN, the account cannot be registered with the CRA.
Date of Birth	Although only mandatory for registered accounts, the client's date of birth should be known to ensure he or she has reached the age of majority. Minors can legally purchase mutual funds but are not contractually bound and can therefore revoke the purchase at any time prior to reaching the age of majority and receive the full amount of the investment back, even if the fund's units have dropped significantly in value. If it is an RRSP account, the birth date will also indicate when the client's RRSP matures for ultimate conversion to a RRIF, annuity, or other maturity option. In the case of a registered account, an order should not be executed nor the account opened without the client's date of birth.

TYPES OF ACCOUNTS

The NAAF also indicates the type of account/purchase (e.g., non-registered, TFSA, RRSP, RRIF). Clients opening RRSP accounts should be told about designating a beneficiary. Although this is not mandatory, clients should be informed that the proceeds of their RRSP would go to their estate if a beneficiary is not named. If the proceeds of the RRSP go to the estate, there could be additional costs (such as probate fees) and delays in the distribution of the proceeds. Other types of accounts, such as joint accounts and accounts in the name of corporations, estates, trusts, partnerships, minors, investment clubs, school boards, public utilities, or religious societies require special documentation. If the purchase is paid for by a contribution to a spousal RRSP, this should be indicated on the form.

JOINT ACCOUNTS

Personal information for all clients (and all co-applicants) must be obtained. For a joint mutual fund account, all parties must have identical time horizons, investment objectives and risk tolerance, as a single recommendation must meet the needs of all owners of the account. The investment knowledge of different owners of the account may differ.

All joint accounts should be registered in the names of all joint account holders and KYC information should be obtained from all account holders. Joint tenancy, trading instructions, including redemption requests, may be accepted from any one joint holder, unless the joint holders have indicated otherwise. Policies may vary among dealers.

All joint applicants must sign the account opening form. Note, however, joint tenancy is not recognized in Quebec.

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TENANTS IN COMMON

If more than one person owns an account and it is not specifically identified as being a joint account, each owner owns a pro-rata share of the account, unless ownership is divided in another manner and noted on the account. Where an account is held as "Tenants in Common", there is no right of survivorship and each owner (unlike a joint account with rights of survivorship), unless otherwise specified, can only give instructions with regard to the pro-rata portion of the account he or she owns. Each mutual fund dealer is required to have policies addressing the ownership of accounts by more than one party.

CORPORATIONS

The mutual fund dealer should obtain a certified copy of the corporation's trading resolution confirming who has trading authority for the corporation and that there are no restrictions on the corporation that prohibit it from purchasing mutual funds in general or particular types of mutual funds. This documentation will ensure that the dealer is entitled to rely on the individuals so designated in receiving instructions on the account in question. If the corporation's charter or by-laws contain this information, a certified copy of this is acceptable. The trading resolution should be kept in the client file. Often trading resolutions authorize persons who hold specified titles to act on behalf of the corporation, in which case an incumbency certificate will be required. The corporate trading resolution must be renewed annually in Quebec. The KYC information obtained for opening a corporate account relates to the corporation, not to the individuals authorized to act on its behalf.

ESTATES AND TRUSTS

The mutual fund dealer should obtain a notarial copy of the letter of probate/administration and include this in the file. Many dealers and fund managers will waive this requirement if the value of the account is modest. In these instances some dealers may also require indemnities from the executor and beneficiaries to the estate. For more information consult with the dealer's compliance department.

PARTNERSHIPS

All partners must sign and approve KYC information unless a certified partnership resolution is provided confirming which partners or employees of the partnership or other persons have trading authority over the account. The partnership trading resolution should be included in the client file.

GROUP PLANS

Many employees belong to group plans. Group plans are sponsored by employers for the benefit of a group of employees. A new client application form and KYC form for each employee in the plan must be completed since each employee likely has a different profile and investment objectives.

MINOR'S ACCOUNTS

The process for setting up accounts for minor children (age varies among provinces) varies among mutual fund dealers. Some mutual fund dealers do not accept accounts for minors, since minors can repudiate mutual fund orders. Since mutual funds may fluctuate in value, this could be a problem if the minor repudiates the purchase of a mutual fund that has declined in value. This is why "in trust" accounts are required at some mutual fund dealers. Another method of dealing with minor accounts is to require the parent's guarantee on the account. In this instance, if the minor repudiates the purchase, the dealer can demand that the parent cover any shortfall.

If a mutual fund dealer opens accounts for minors, it is often opened in the name of the parent or guardian in trust for the child (for example, John Doe [parent/guardian] in trust for Jane Doe [child]. Policies vary among dealers. The dealing representative should obtain KYC information for both the parent and the child to the extent possible.

All purchase and redemption orders for the account should be either placed by the parent or confirmed by the parent verbally or in writing. No formal trust deed is required as there is no document (Declaration of Trust) that establishes an informal trust. If a formal trust has been created, the account should be in the name of the trust, not the beneficiary or the trustee.

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INVESTMENT CLUBS

When opening an account in the name of an investment club, the mutual fund dealer should take steps to make sure that the club has been properly structured. It must meet the definition of an investment club and thus be exempt from registration under securities legislation. Investment clubs are specifically defined as "private mutual funds" in some securities legislation. If an investment club wishes to establish an account with your dealer, contact your Compliance Department and discuss the structure and rules of the club with authorized members of the club to ensure that it is an investment club as defined in securities legislation.

EXAMPLE

Under the British Columbia Securities Act, an investment club must fulfill the following criteria to qualify as a private mutual fund and be exempt from registration: the club must have no more than 50 shareholders; it must never have issued public debt; it must not pay any member of the club for investment, management or administration advice (except normal brokerage fees); and all members must make pro rata contributions to finance its operations.

A trading resolution should be obtained authorizing one or more persons to trade on behalf of the investment club. A copy should be retained in the file and the original forwarded to Head Office. Here again, policies vary.

SCHOOL BOARDS, PUBLIC UTILITIES, LODGES, SOCIETIES AND HOUSES OF WORSHIP

As with investment clubs, obtain a trading resolution authorizing one or more individuals to act on behalf of the institution. A copy should be retained in the file at the branch and the original forwarded to the Head Office. (Each mutual fund dealer should have an applicable policy.)

INTERMEDIARIES, TRANSFERS, AND REFERRALS

Securities owned by clients of an intermediary (e.g., a mutual fund dealer) are generally recorded either in the client's name or in the name of the intermediary. Securities that are recorded in the client's name are commonly referred to as "client-name securities". Securities that are recorded in the name of the intermediary are commonly referred to as "nominee-name securities".

A **client name account** is an account registered directly in the name of the owner of the account with the mutual fund.

A **nominee account** (also known as **"on-book" for brokers**) is an account registered in the name of a dealer or third-party administrator on behalf of the owner of the mutual fund. A **nominee owner** is a person or entity named to act on behalf of another person or entity (e.g., beneficial owner), usually to facilitate the processing of transactions.

Where nominee-name registration is used, dealers must have appropriate controls and procedures in place to protect its clients against fraud and the firm's insolvency. Effective internal and external oversight over operations is essential.

A mutual fund account may be transferred only by a mutual fund dealer with the written authorization of the client, the nominee, or a person duly authorized by the client to provide such authorization. All transfers should be completed in a diligent and prompt manner to ensure that the transfer takes place in an orderly and timely way. A transfer cannot be delayed in an attempt to persuade the client not to transfer the account or to determine the reason for the transfer.

CIRO defines a **referral arrangement** as an arrangement where a representative or a member firm agrees to provide or receive a referral fee to or from another person or company. A referral fee refers to any benefit, whether direct or indirect, provided for the referral of a client. The arrangement does not include payment to a third-party service provider where the service provider has no direct contact with clients and where the services are not securities related.

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Referral arrangements are permitted on the following terms (among others) and in accordance with applicable CIRO rules:

- there is a written agreement governing the referral arrangement prior to implementation
- all fees or other form of compensation paid as part of the referral arrangement must be recorded on the member's books and records
- written disclosure of referral arrangements must be made to clients prior to any transactions taking place or provides any services. The disclosure document must include an explanation or an example of how the referral fee is calculated, as well as the name of the parties receiving and paying the fee

Prior to engaging in any activity that may result from a referral arrangement representatives should consult with their dealer's policies and procedures as well as seeking guidance from the Compliance Department.

WHAT ARE THE PROHIBITED SELLING PRACTICES?

Prohibited selling practices refer to sales practices that are clearly illegal or otherwise unacceptable to securities regulators. Engaging in these and other types of overselling and unethical behaviour could lead to a loss of registration and other potential enforcement sanctions. The following practices are prohibited under mutual fund regulations.

QUOTING A FUTURE PRICE

When an investor places an order to buy or sell a mutual fund, the price per unit or share that the investor will be paying or receiving is not known. This is because the purchase or sale price is based on the end of day NAV which is determined by the closing or last quoted price of all securities in the portfolio after the markets close at 4 p.m. Eastern time. Depending on the time of day in which the order is entered, the NAVPS may be calculated at the closing price of the current business day or at the closing price of the next business day. Mutual fund managers specify the time by which a trade must be received by the fund to receive the NAVPS determined on the current business day. Usually, orders submitted after 4 p.m. Eastern time are entered at the next business day NAV. It is unlawful for a dealing representative to backdate an order in an attempt to buy shares or units at a previous day's price.

OFFER TO REPURCHASE

A dealing representative may not make offers to repurchase securities in an attempt to insulate investors from downturns in price. Investors have the normal right of redemption should they wish to sell their mutual fund investments.

SELLING WITHOUT BEING REGISTERED

As mentioned above, mutual fund dealing representatives must be registered to sell mutual funds. This requires registration with the securities administrator in each province and territory in which the clients to whom they sell mutual funds reside. A dealing representative must keep the securities administrator informed of material changes in the material information provided on the dealing representative's registration application.

ADVERTISING THE REGISTRATION

Dealing representatives may not advertise or promote the fact that they are registered with a securities administrator in most provinces and territories, as this may imply that the securities administrator has sanctioned or approved their conduct or the quality of the funds they are offering.

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USE OF TRADE NAMES BY DEALING REPRESENTATIVES

A dealing representative may not conduct business using a business or trade name or style name other than the one owned by his or her mutual fund dealer or an affiliated corporation, unless:

- the mutual fund dealer has given prior written consent
- all materials communicated to clients include the mutual fund dealer's legal name equally as prominently as the business or trade or style name used by the dealing representative

PROMISING A FUTURE PRICE

Dealing representatives may not make promises that the NAVPS of a fund will achieve a certain level or increase by any amount.

SALES MADE FROM ONE PROVINCE INTO ANOTHER PROVINCE, TERRITORY OR COUNTRY

While telecommunications have given access to the entire country, the filling of orders from a client, even unsolicited, is not permitted unless the dealing representative is registered in the client's province or territory. Selling mutual funds to clients in a province or territory where the dealing representative is not registered, or to residents of a foreign country, may result in the cancellation of the mutual fund dealing representative's registration or other disciplinary action.

SALE OF SECURITIES AND OTHER PRODUCTS

It may be illegal for a mutual fund dealing representative to sell products for which the dealing representative is not registered or licensed. For example, it is not permissible for a dealing representative to sell securities, other than mutual funds, in certain provinces or territories unless registered in an appropriate category to do so in that province or territory.

PROVISION OF NON-MONETARY BENEFITS

Receipt of non-monetary gifts or benefits by dealing representatives from mutual fund managers and their affiliates is forbidden unless they are of such minimal value or frequency that the salesperson's behaviour would not be influenced (such as pens, t-shirts, hats and golf balls). This is not an exhaustive list. It is the dealing representative's responsibility to be aware of what is, and is not, allowed. The Investment Funds Institute of Canada (IFIC) puts out Sales Practices Bulletins, which interpret and give examples of acceptable and unacceptable sales practices. Most financial organizations and mutual fund dealers require its dealing representatives to sign a code of conduct that specifically states that he or she is not allowed to accept non-monetary benefits from clients or persons with whom she has other dealings that may give rise to a conflict of interest.

RESTRICTION ON POWER OF ATTORNEY

CIRO prohibits dealing representatives, officers and directors of a mutual fund dealer from accepting a general power of attorney or similar authorization from a client in their favour and relying on such power of attorney or similar authorization to place trades to purchase or sell securities on behalf of the client for the client's account with the mutual fund dealer. If they did so, they would be engaged in the prohibited practice of **discretionary trading**. A discretionary trade is defined as any purchase or sale where the dealing representative determines the timing and/or price of a sale or purchase.

There are a few exceptions to this general rule. In the case of client name accounts, for example, a member or dealing representative may accept a limited trading authorization from a client for the express purpose of facilitating trade execution. The limited trading authorization must be authorized by CIRO and approved by an authorized supervisor (e.g., the compliance officer or branch manager) and retained in the client's file. Each purchase or redemption made through a limited trading authorization must be identified as such in all records.

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WHAT ARE THE RULES FOR COMMUNICATIONS WITH CLIENTS?

Rules applicable to communications with clients, including sales communications, and the handling of client complaints, are set forth in National Instrument 81-102 and CIRO MFDR Rule No. 300.

SALES COMMUNICATIONS

As mentioned earlier, National Instrument 81-102 sets out specific requirements and prohibitions regarding sales communications. The provisions of NI 81-102 apply whether the communication comes from the dealing representative, the dealing representative's dealer, the fund's promoter, manager, distributor, or anyone who provides a service to the client with respect to the mutual fund. When in doubt, the dealing representative should always consult with his or her branch supervisor, manager, or compliance officer.

Approval is needed before any sales communications are sent out. The provisions apply to any type of sales communications, including advertising or any oral or written statements that the dealing representative makes to a client or a potential client. Sales communications can include, for example:

- a description of the fund's characteristics
- comparisons between funds under common management, funds with similar investment objectives or a comparison of the fund to an index
- performance information—specific rules dictate how this information must be calculated and presented
- advertising that the fund is a no-load fund

It is important that the sales communication does not mislead a client. The communication cannot make any untrue statement or omit any information that would make the communication misleading, or present information in a way that distorts the information. All information must be wholly consistent with the information found in the fund's fund facts document and simplified prospectus.

HANDLING COMPLAINTS

A client who is not satisfied with a product or service has the right to make a complaint and to ask to have the problem rectified. It is important that client complaints regarding mutual funds be handled efficiently and professionally. Failure to deal adequately with such complaints can lead to problems with the securities administrators and the SROs. A client complaint may be related to a service issue (e.g., insufficient representative contact) or a regulatory issue (e.g., performance or suitability of their account holdings). Your dealer has procedures in place for handling client complaints, which should be strictly observed.

CIRO MFDR Rule No. 300 specifies the minimum procedures for dealing with written client complaints (including emails). All written client complaints must be acknowledged in writing. The results of an investigation into a client complaint must be conveyed in writing to the client in due course and must be handled by a qualified supervisor or member of the compliance staff. The registered dealing representative involved and his or her supervisors should be made aware of the complaint, and senior management should be informed of complaints alleging serious misconduct and of all legal actions arising from such complaints.

In Quebec, regulated persons must receive clients' complaints, impartially examine them, and provide appropriate answers.

A complaint is the expression of one of the following three elements:

- a reproach against a regulated person
- the identification of real or potential harm that a consumer has experienced or may experience
- a request for remedial action

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A regulated person must examine every complaint, not just those relating to a possible violation of the law. To be admissible, the complainant must file a complaint in writing. If the complaint is incomplete and the regulated person requires additional information, then the complainant must provide this information in writing. The AMF provides assistance to consumers through its Information Centre as well as documentation to guide consumers in the drafting of their complaints.

WHAT ARE YOUR OTHER LEGAL RESPONSIBILITIES?

In addition to acting ethically and in compliance with industry and agency rules—such as the rules for disclosure and suitability—mutual fund sales representatives must also comply with other legal requirements. Becoming familiar with the federal privacy law and anti-money laundering and terrorist financing legislation is important, because it will help you stay in compliance and better serve your clients and your firm.

PRIVACY LAW

Clients are increasingly concerned about the privacy of the personal information they provide to various private organizations, governments and individuals, including mutual fund sales representatives. In an age of instant telecommunication and electronic technologies, personal and private information can be disseminated widely and indiscriminately by the click of a mouse. That's why governments have become serious about providing protection to individuals and have put in place laws designed to safeguard the confidentiality of personal information and to regulate its collection, use and disclosure.

In September 1998, the federal government announced a strategy designed to position Canada as a world leader in the development and use of electronic commerce. To achieve this ambitious goal, the government adopted the **Personal Information Protection and Electronic Documents Act (PIPEDA)** in April 2000. PIPEDA incorporated and made into law ten principles set out by the Canadian Standards Association (CSA) in 1996.

The *Act* provides protection for personal information and grants legal status to electronic documents. For example, the *Act* requires firms to:

- Obtain consent when they collect, use or disclose personal information.
- Provide a product or service even if an individual refuses consent to the collection, use or disclosure of personal information, unless that information is essential to the transaction.
- Collect information by fair and lawful means.
- Have personal information policies that are clear, understandable and readily available.

An exception is that an advisor or sales representative may disclose financial and other personal information without the client's consent when a government representative has legal authority to obtain the information or when the disclosure is required to administer a federal or provincial law.

For example, inquiries conducted by the Canada Revenue Agency are often confidential. Therefore, the financial institution representative who receives the request cannot inform the client that an investigation is taking place. Thus, there are situations when the law authorizes disclosure without knowledge or consent. The financial institution or dealer you work with may have its own process for validating "authorized" access to files. You should review its policy on this matter.

The CSA standards on which PIPEDA is based were adapted for banks and set out in the Canadian Bankers Association (CBA) Privacy Model Code in 1996. These standards relate to the following conditions:

- accountability
- identifying the purposes for the collection of personal information

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- obtaining consent
- limiting collection
- limiting use, disclosure and retention
- ensuring accuracy
- providing adequate security
- making information management policies readily available
- the rights of individuals to:
  - access their personal information
  - challenge compliance with the rules

The federal law also established a **Privacy Commissioner** as an oversight mechanism. Consumers have the right to file a complaint about any aspect of compliance with PIPEDA. Clients are entitled to file a complaint against a financial institution for its apparent breach of compliance with the measures in the federal law for protecting their personal information. To resolve complaints, clients should initially be encouraged to use a financial institution's (or dealer's) own internal redress body.

The Privacy Commissioner is empowered to:

- receive complaints
- conduct investigations
- attempt to resolve complaints
- audit the personal information management practices of an organization

Unresolved disputes can be taken to the Federal Court, and the Court may order the financial institution to correct its practices and/or award damages to the complainant.

In addition to the above obligations, there are additional and recently enacted requirements that pertain to disclosure and notification requirements (both to impacted individuals as well as the privacy commissioner) when there is a breach of these privacy requirements resulting in an inappropriate release of private information.

These obligations apply when a release of private information has occurred resulting from a breach of security safeguards. If this is to occur an evaluation must take place if such a breach is likely to cause real risk of significant harm to the individual in question. If this is the case, appropriate disclosure and notification is required to both the Privacy Commissioner as well as the impacted individuals.

There are additional record keeping obligations as well.

Registrants should carefully review their dealer's privacy policy for further information.

ELECTRONIC COMMERCE

Electronic commerce (e-commerce) refers to online business activities such as purchasing, distributing, selling, and other transactions. For financial institutions, however, e-commerce involves more than simple buying and selling online. It means conducting transactions involving the following instruments:

- automated banking machines
- credit and debit cards
- electronic data interchange (transmission of information between financial institutions over private network)
- banking by phone and online banking
- faxes

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The law extends to electronic documents and signatures. An **electronic document** is data recorded or stored in a computer system or other similar device that can be read or perceived by a person or a computer system or other similar device. This includes displays, printouts and other output of that data. For example, a fax or an e-mail is an electronic document protected by the Privacy Law. An **electronic signature** is a person's signature in digital form that is incorporated in, attached to, or associated with an electronic document.

Canada's financial institutions have always been committed to keeping their customers' personal information accurate, confidential, secure and private. The guiding principles and most requirements of the *Act* are the same as the voluntary privacy standards that firms have followed for many years. Although customers will see little change, the Act has significant implications for financial institution representatives. You now have a legal responsibility to ensure that these measures continue to apply to your everyday work and client interactions.

ANTI-MONEY LAUNDERING AND TERRORIST FINANCING

Your legal responsibilities extend to reporting transactions or dealings that may involve money laundering or terrorist financing. Everyone involved in efforts against money laundering and terrorist financing agrees that these crimes are increasingly dangerous and difficult to detect and deter, and that they are global problems requiring national and international solutions.

Money laundering (proceeds of crime) is about accepting cash (or assets) obtained illegally and making it appear legitimate. It is a criminal offence punishable under Canada's Criminal Code. Individuals launder money to disguise or conceal the nature or ownership of the cash that was obtained through an illegal activity, hence the idea of "dirty money."

Money launderers have long seen Canada as an ideal country to practice their trade. A number of factors have encouraged this, including:

- Canada's stable banking system with confidentiality as one of its hallmarks.
- A government and economy viewed as stable and a relatively high standard of living in which to hide illegal wealth.
- A moderate and liberal justice system where penalties tend to be far less severe than in other democratic nations.
- A large unguarded border with the United States; until January 6, 2003, Canada lacked cross-border controls over the movement of money.

Canadian financial institutions have traditionally acted against money laundering and terrorist financing by reporting unusual transactions voluntarily to the authorities. The latest efforts of the federal government complement and enhance the measures that have been taken.

Figure 17.3 provides a flow chart of the money laundering process. The figure shows that there are three basic stages of money laundering—placement, layering, and integration. As you move from the bottom to the top of the figure, you can see how the proceeds of crime get converted into clean (i.e., laundered) funds.

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Figure 17.3 | The Money Laundering Process

Under current legislation, specified persons and entities are required to:

- report suspicious and certain prescribed transactions
- implement a compliance regime
- verify client identification regarding specific transactions (account opening)
- comply with new record-keeping requirements
- report any deposit transactions of $10,000 CDN or more made in cash

REPORTING ENTITIES

Persons and entities required to report suspicious transactions and certain prescribed transactions are:

- financial entities (e.g., banks, credit unions, caisses populaires, trust and loan companies, and agents of the Crown that accept deposit liabilities)
- life insurance companies, brokers and agents
- securities dealers, including portfolio managers and investment counsellors
- persons engaged in the business of foreign exchange dealing
- money services businesses
- Canada Post when it sells or redeems money orders
- accountants and accounting firms (when carrying out specific activities for clients)
- gambling casinos

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- legal counsel and legal firms (when carrying out specific activities for clients)
- real estate brokers and sales representatives (when carrying out specific activities for clients)

In Canada, "money services businesses" include any individual or entity engaged in foreign exchange dealing, remitting or transmitting funds by any means, and issuing or redeeming negotiable instruments, such as money orders or traveller's cheques.

Exhibit 17.1

Hawala and Hundi, are names for a money services business that operates outside of traditional banking or financial channels. This business was developed in India before the introduction of western banking practices and is today a major remittance system used around the world. Chop and Chitti are names for an alternative remittance system that arose in China and is also used around the world today. These systems are based on trust, family relationships, and regional affiliations. Transfers commonly take place among alternative dealer networks and often in the absence of actual instruments. Thus, money can be transferred without actually moving it. Alternative remittance systems have legitimate uses but also are avenues for money laundering and terrorist financing.

REPORTING TRANSACTIONS

Employees of the listed persons or entities, including mutual fund sales representatives, are also required to report these transactions within organizational guidelines. You must be able to recognize transactions that could be linked to money laundering or terrorist financing and report specific transactions according to your employer's internal policies and procedures, which in turn may be reported to the Financial Transactions and Reports Analysis Centre of Canada (FINTRAC) through your employer's compliance unit.

For some individuals working in the financial services industry, the practice of reporting suspicious transactions and terrorist financing activities will be new. The challenge is to find a balance between winning the business and recognizing these transactions.

WHAT IS TERRORIST FINANCING?

Terrorist financing (proceeds for crime) provides funds for terrorist activity. A terrorist or terrorist group includes anyone (e.g., an individual, group, trust, partnership, organization) that has any purpose or engages in an activity to facilitate or carry out any terrorist activity.

The main goal of terrorist activity is to use intimidation against a specific population or to coerce a government to do something. This can be accomplished by directly causing death or serious harm, or causing substantial property damage that may cause death, injury, or disruption of essential services. It can also be accomplished indirectly through impacting a country's economy (e.g., with stock markets dropping out of fear of further violent attacks, such as what happened after September 11, 2001).

Similar to a successful criminal organization, a successful terrorist group must build and maintain an effective financial infrastructure. To complete this task, the source of funding must be hidden. The sums of money required for a terrorist attack are not always large and the associated transactions are not necessarily complex.

The methods terrorists use to generate funds differ from those employed by criminal organizations:

- Financial support may be obtained from certain countries, organizations, or wealthy individuals; this is often referred to as state-sponsored terrorism.
- Money may be acquired through criminal revenue-generating activities (e.g., kidnapping, extortion, fraud, smuggling, robbery, drug trafficking).
- Financial support may be obtained from legal sources such as donations or sales of publications; such funds may be more difficult to detect or trace.

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FINANCIAL ACTION TASK FORCE

The **Financial Action Task Force (FATF)** is an inter-governmental body whose purpose is to develop and promote national and international policies to combat money laundering and terrorist financing. Financial institutions in FATF member countries have the obligation to identify all clients, including any beneficial owners of property, and keep appropriate records. They are also required to report suspicious transactions to the competent national authorities and to implement a comprehensive range of internal control measures.

The FATF:

- Monitors members' progress in implementing anti-money laundering and terrorist financing measures.
- Reviews money laundering and terrorist financing techniques and counter-measures.
- Promotes the adoption and implementation of anti-money laundering and terrorist financing measures globally.

In performing these activities, FATF collaborates with other international bodies involved in combating money laundering and terrorist financing. In addition, FATF annually publishes a list of countries currently identified as non-cooperating in the development and implementation of money laundering and terrorist financing controls. That list is reviewed annually to add new names or delete names of countries that have met FATF standards.

The FATF reviews its mission every five years and has been in existence since 1989. At the end of February 2024, the FATF consisted of 38 members.

In this context, the KYC rule takes on extra meaning. Meeting your legal, ethical, and professional responsibilities in knowing your client is more than good business. It is an essential service you provide that benefits and protects the industry as well as you, your clients and your firm.

EMPLOYEE RESPONSIBILITIES

Every person who is registered as a mutual fund representative has certain regulatory responsibilities. Do you know what those responsibilities are? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Describe the role, mandate, and scope of the securities administrators in Canada.
   - The provincial securities and territorial administrators are regulatory bodies responsible for the administration of the provincial and territorial securities legislation, regulations and rules. The goal is the protection of investors who purchase securities in the particular province or territory.
   - The securities administrators are administrative bodies under the authority of their respective provincial or territorial government. The administrators have broad powers, including investigation and prosecution, registration and disclosure.
   - The securities administrators periodically issue policy statements. These statements clarify the position of the securities administrators on various issues.
2. Describe the role and objectives of the Canadian Investor Regulatory Organization (CIRO) and the Autorité des marchés financiers (AMF).
   - The main objective of CIRO is to protect Canadian mutual fund investors and ensure that they have the same level of protection regardless of the mutual fund dealer or dealing representative they deal with.
   - CIRO has the power to enforce standards and conduct investigations and is responsible for the enforcement of rules and policies relating to its members, their employees and agents.
   - The AMF ensures compliance with the regulatory requirements relating to access the distribution of financial products and services. The AMF also issues an individual's or entity's right to practice.
   - A Branch Compliance Officer (BCO) must be appointed for each registered branch with four or more mutual funds dealing representatives. The BCO is responsible for ensuring compliance with the regulatory requirements within the branch by monitoring the conduct of the mutual fund dealing representatives.
3. List and explain the registration requirements for becoming registered as a mutual fund dealing representative.
   - Before becoming eligible for registration, an applicant must pass an examination recognized by the applicable provincial or territorial securities commission.
   - A mutual fund dealing representative (or his/her dealer) must pay a registration fee on an annual basis. If not paid, the registration expires.
   - As soon as a dealing representative ceases to work for a registered dealer, registration is automatically suspended. Before a dealing representative's registration can be reinstated, notice in writing must be received by the applicable securities commission from another registered dealer of the employment or sponsorship of the dealing representative by that other dealer.
   - When transferring to another province or territory to work for or be sponsored by the same mutual fund dealer, a notice must be filed with the securities commission in the new province or territory. Upon termination, registration is suspended until reinstated upon employment with or sponsorship by another dealer.
4. Describe the KYC rule within the context of suitability, the circumstances in which suitability of a client account must be re-assessed, know your product and opening accounts for clients.
   - Securities regulations require that dealers and their dealing representatives know the personal and financial circumstances, investment needs and objectives, investment knowledge, time horizon and risk profile of their clients by requiring the provision of KYC information in all cases.
   - This information must be obtained for all persons who have trading authority for the account as well as other persons with a financial interest in the account.

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- Suitability of investments held in the client account must be re-assessed whenever the client transfers their account to the dealer, or whenever the dealer or mutual fund dealing representative becomes aware of a material change in the KYC information previously provided and/or anytime where there has been a change in the mutual fund dealing representative responsible for the client account.
- The suitability requirement applies to recommendations that a dealing representative may make to a client and unsolicited orders (i.e., orders for mutual funds that have not been recommended by the dealing representative but instead come from the clients).
- Especially important is information about individuals with a financial interest in an account, information about changes in the client's circumstances, and requirements relating to anti-money laundering and anti-terrorist financing laws.

5. List and explain account opening procedures, including the relationship disclosure, the steps in completing the new account application form (NAAF), differentiate among the types of accounts and the circumstances in which KYC information requires an update.
   - Relationship disclosure information is all the information that a reasonable client would consider important about their relationship with the mutual fund dealer and the dealing representative.
   - The application form or account opening form, often referred to as the new account application form (NAAF), is used to open new accounts and may also be used to record changes to the personal information in a client's file.
   - The NAAF must include the client's full legal name, permanent address, mailing address, social insurance number (SIN), and date of birth.
   - The NAAF also indicates the type of account. Types of accounts include joint accounts, tenants in common, corporations, estates and trusts, partnerships, group plans, minor's accounts, investment clubs, school boards, public utilities, lodges, societies and houses of worship.
   - Know Your Client Information requires an update where there has been a material change in the client information previously provided. Material changes include, but are by no means limited to, changes to the client's risk tolerance, investment time horizon, investment objectives of the client or a material change in the client assets or income.
6. List and distinguish among the prohibited mutual fund sales practices.
   - A number of sales practices are clearly illegal or unacceptable. These include quoting a future price, offering to repurchase a security, selling without being registered, advertising one's registration, sales made from one province to residents of a province or territory in which the dealing representative is not registered, sale of securities other than mutual funds, and acceptance of non-monetary benefits from fund managers.
7. Describe the rules applicable to sales and performance communications with clients, including the procedures for handling complaints.
   - National Instrument 81-102 includes requirements and prohibitions applicable to sales communications for mutual funds. Of vital importance is that sales communications do not mislead clients or potential clients. All information in a sales communication must be consistent with the information found in the fund's fund facts document and simplified prospectus.
   - Approval is needed before any sales communications are sent out. The provisions apply to any type of sales communications, including advertising or any oral or written statements that the dealing representative makes to a client or a potential client.
   - A client who is not satisfied with a product or service has the right to make a complaint and ask to have the problem rectified. Each mutual fund dealer is required to have procedures in place for handling client complaints — these should be strictly observed.

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8. Summarize the importance of the federal privacy guidelines and the anti-money laundering and anti-terrorist financing legislation as part of the requirements of a mutual fund sales representative.
   - Governments have become serious about providing protection to individuals and have put in place laws designed to safeguard the confidentiality of personal information and to regulate its collection, use and disclosure.
   - The federal government adopted the Personal Information Protection and Electronic Documents Act (PIPEDA) in April 2000.
   - The Act provides protection for personal information and grants legal status to electronic documents.
   - The Privacy Commissioner is empowered to receive complaints, conduct investigations, attempt to resolve complaints, and audit the personal information management practices of an organization.
   - Money laundering (proceeds of crime) is about accepting cash (or assets) obtained illegally and making it appear legitimate. It is a criminal offence punishable under Canada's Criminal Code.
   - There are three basic stages of money laundering—placement, layering, and integration.
   - Terrorist financing (proceeds for crime) provides funds for terrorist activity. A terrorist or terrorist group includes anyone (e.g., an individual, group, trust, partnership, organization) that has any purpose or engages in an activity to facilitate or carry out any terrorist activity.
   - The Financial Action Task Force (FATF) is an inter-governmental body whose purpose is to develop and promote national and international policies to combat money laundering and terrorist financing.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 17 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 17 FAQs.

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Applying Ethical Standards to What You Have Learned

18

CONTENT AREAS

What Are Ethics and the Standard of Conduct?

How to Apply What You've Learned to Case Studies

LEARNING OBJECTIVES

1 | Summarize the roles of ethical decision-making and the standard of conduct in building trust and confidence within the securities industry and the values that sales representatives should apply in their relationships with clients.

2 | Apply what you have learned throughout this course to various client scenarios.

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KEY TERMS

Key terms are defined in the Glossary and appear in **bold** text in the chapter.

confidentiality

duty of care

ethical decision-making

ethics

integrity

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INTRODUCTION

The role of the mutual fund sales representative is to make sure that clients buy only suitable investments given their personal and financial circumstances, investment needs and objectives, investment knowledge, risk profile, and investment time horizon. There must be a good fit between the investments chosen by the client and the characteristics of the client.

In order to make sure that the fit is good, the mutual fund sales representative must know the client and the products. The better you know both the client and the products, the better are the chances for a good fit.

Tied into this approach is the important role ethics play in the process of making decisions for clients. When dealing with the public, you have a duty to act ethically, most importantly by placing the needs and interests of the client above all else. Behaving ethically is the cornerstone of maintaining and enhancing the integrity of the industry.

WHAT ARE ETHICS AND THE STANDARD OF CONDUCT?

A critical element in building a solid trusting relationship with a client is behaving in an ethical manner. **Ethics** can be defined as a set of moral values that guide behaviour. Moral values are enduring beliefs that reflect standards of what is right and what is wrong.

ETHICAL DECISION-MAKING

Ethical decision-making is based on the principles of trust, integrity, justice, fairness, honesty, responsibility, and reliability. The securities industry cannot exist without the trust and confidence of the public. Registrants in the securities industry play an important role and must regularly generate trust and confidence in their clients by adhering to high standards of ethical conduct in all of their dealings.

Ethics is defined generally as a set of values and standards that guide individual behaviour. A person's values can change over time, but the change is always driven by standards of right and wrong, rather than by personal need. Commonly agreed-on ethical values include accountability, fairness, honesty, loyalty, reliability, and trustworthiness.

As a concept, ethics can be defined more specifically in the following three ways:

- The rules or standards governing the behaviour of a particular group or profession
- A set of moral principles or values
- The study of the general nature of morals and the moral choices made by individuals

There is a key difference between ethical behaviour and mere compliance with rules. Following rules does not involve judgment, and compliance results only in conformity with externally established standards. Some rules simply codify consensus practices, such as the rule stating that stock trades settle one business day after the trade date. Other rules approximate ethics by incorporating ethical behaviour, such as the law against stealing.

Rules are designed to deal with the most significant or most common situations. They cannot encompass every possible situation that may occur in day-to-day business. People follow rules because they must, not necessarily because they believe it is morally correct. Ethical behaviour, in contrast, requires judgment based on internally established moral values. Ethical decision-making is a system that can be applied to any situation, even one where no rule exists to govern behaviour.

Such a system might involve the following steps:

1. Recognize that a moral dilemma exists.
2. Assess your options in terms of moral criteria.

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3. Make a commitment to a morally appropriate strategy.
4. Have the courage to carry out the strategy.

THE STANDARD OF CONDUCT AND ETHICAL GUIDELINES

As the national self-regulatory organization that oversees mutual fund distribution, CIRO regulates the actions and behaviour of registered individuals. Along with strict compliance with its rules and regulations, CIRO requires that registered individuals observe high standards of ethics and conduct when transacting their business. This integration of ethics into industry rules essentially applies to all of a registered individual's actions and everyday behaviour with clients.

DID YOU KNOW?

According to CIRO's Mutual Fund Dealer Rules, Rule 2.1.1 *Standard of Conduct states*:

Each Member and each Approved Person of a Member shall:

a. deal fairly, honestly and in good faith with its clients;
b. observe high standards of ethics and conduct in the transaction of business;
c. not engage in any business conduct or practice which is unbecoming or detrimental to the public interest; and
d. be of such character and business repute and have such experience and training as is consistent with the standards described in this Rule 2.1.1, or as may be prescribed by the Corporation.

The securities industry has no formal code of ethics. However, industry rules and regulations imply a set of ethical standards. For the purposes of this course, we have distilled these rules and standards into the following five primary values that registered individuals must observe:

Exhibit 18.1 | Five Primary Values — Summary

Primary Value	Areas of Focus
Duty of Care	• Know Your Client • Due Diligence • Unsolicited Orders
Integrity	• Act in an honest, fair, and trustworthy manner • Priority of Client's Interests • Respect for Client's Assets • Complete and Accurate Information Relayed to Client • Disclosure
Professionalism	• Client Business • Client Orders • Trades by Registered and Approved Individuals • Personal Business • Personal Financial Dealings with Clients • Other Personal Endeavours

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Exhibit 18.1 | Five Primary Values — Summary

Primary Value	Areas of Focus
Compliance	• Compliance with the Securities Acts and SRO Rules
Confidentiality	• Client Information • Use of Confidential Information

DUTY OF CARE

While **duty of care** encompasses a wide number of obligations towards parties, the obligation to know the client is of paramount importance in order to ensure the priority of clients' interests. Including this, the three major components of duty of care are:

Know Your Client	The Know-Your-Client (KYC) rule is paramount for the industry. As you have learned throughout this course, you must learn the essential financial and personal circumstances and the investment objectives of each client. You must also know the client's level of investment knowledge, their risk profile, and an understanding of their investment time horizons. Client account documentation should reflect all material information about the client's current status, and should be updated to reflect any material changes to the client's status in order to assure suitability of investment recommendations.
Due Diligence	You must make all recommendations based on a careful analysis of both information about the client and information related to the particular transaction. You must know your products, including how they are constructed, their features, costs, and a general idea of how they are likely to perform in various market conditions.
Unsolicited Orders	When you give advice to clients, you must provide appropriate cautionary advice with respect to unsolicited orders that appear unsuitable based on client information. You must be aware of the investment objectives and strategies behind each order accepted on behalf of your clients, whether it is solicited or not. You should take appropriate safeguarding measures when clients insist on proceeding with unsolicited, unsuitable orders.

You must make a concerted effort to *know the client*—to understand the financial and personal circumstances and aspirations of the client. You will make recommendations for the client to invest funds in mutual funds that reflect, to the best of your knowledge, these considerations. Having provided sound advice, you will be above reproach for potentially unsuitable purchases and sales of securities for a client if the client does not heed your advice.

INTEGRITY

You must display absolute **integrity** since the client's interests must be the foremost consideration in all business dealings. This requires that you observe the following:

Honest, Fair, and Trustworthy	You must act in an honest, fair, and trustworthy manner in all dealings with clients, employers, colleagues, and the public. You must avoid entering into situations where your interests conflict with those of your clients.
Priority of Client's Interest	The client's interest must be the foremost consideration in all business dealings. In situations where you may have an interest that competes with that of the client, the client's interest must be given priority.

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Respect for Client's Assets	The client's assets are the property solely of the client and are to be used only for the client's purposes. You cannot utilize client funds or securities in any way.
Complete and Accurate Information Relayed to Client	You must take reasonable steps to ensure that all information given to the client regarding his or her existing portfolio is complete and accurate. While the onus is on your dealer to provide each client with written confirmations of all purchases and sales, you must accurately represent the details of each client's investments to the client. You must be familiar with the clients' investment holdings and must not misrepresent the facts to the client in order to create a more favourable view of the portfolio.
Disclosure	You must disclose all real and potential conflicts of interest in order to ensure fair, objective dealings with clients.

As a mutual fund sales representative, clients need to know that you are working to promote their best interests.

When clients trust you, they do not personally have to verify everything that you tell them. For example, they do not have to check the tax and estate implications of every investment recommendation or ask for details about its risk or volatility. They certainly do not waste time wondering if you have made a recommendation that serves your interests rather than the client's own interest.

There are two parts to a trust relationship: trust in your *competence* and *integrity*. Both are essential. Competence, without integrity, leaves clients at the mercy of a self-serving professional. Integrity, without competence, puts clients in the hands of a well-meaning but inept professional.

In order to ensure that advisors are competent, they must meet proficiency requirements for their registration category.

Exhibit 18.2 | Gaining a Client's Trust

When Ottawa mutual fund sales representative Jo-Ann Carter assumed the account of 65-year-old Ena Beyer, she knew she had a challenge on her hands.

Mrs. Beyer, a widow, held more than $350,000 in a non-registered mutual fund account—and the entire amount was invested in a combination of money market and mortgage mutual funds. After the first meeting, it was evident that her new client's investment knowledge was very limited and that she relied almost entirely on her son for financial advice.

Therein lay the problem. Her son, a systems-services professional employed by a high-tech firm, had been generating great returns for his own portfolio by investing in various Canadian and U.S. technology stocks.

When Mrs. Beyer passed over a sheet of paper listing some of her son's recommendations, Carter immediately shook her head. The proposed list of holdings included an excessive amount in equity mutual funds, especially aggressive high-growth situations, and not nearly enough in dividend-paying blue-chip fixed-income funds.

Convinced that the son's proposed strategy was overly aggressive for someone with Mrs. Beyer's client profile, Carter recommended to her a much more conservative approach. Mrs. Beyer balked at the suggestions for change, siding with her son over someone she was meeting only for the first time.

The easy way out for Carter would have been to go along with what the son suggested and Mrs. Beyer wanted. Carter could easily have rationalized the choices, since one of Mrs. Beyer's objectives was to pass on an inheritance to her son. By questioning the son's judgement, Carter risked losing an attractive account.

But in good conscience, Carter could not go along with Mrs. Beyer's requests without making further inquiries to determine what in fact was in Mrs. Beyer's best interests. Carter asked her to set up a meeting with her son so that the three of them could discuss her situation together.

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Exhibit 18.2 | Gaining a Client's Trust

A few weeks later, the agreed-on meeting started poorly. Mrs. Beyer's son, Roy, seemed skeptical of Carter's abilities and was a little suspicious about her intentions. Undeterred, Carter patiently explained her responsibility as a mutual fund sales representative, her concerns about his mother's account and the reasons for her recommendations.

After the first meeting, Roy said he was not yet convinced, but would think about it. His mother concurred. "It took some time, but after a couple more meetings, her son was impressed with my recommendations," says Carter. "In the end, we had totally revamped the asset mix to ensure prudent allocation of his mother's investments."

With Mrs. Beyer more comfortable knowing her son was involved, Carter also felt more assured that she would be able to get better results for her client. "We now meet regularly and the trust that has developed between the three of us is very strong."

PROFESSIONALISM

It is generally accepted that professionals, by having specialized knowledge, need to protect their clients, who usually do not have the same degree of specialized knowledge, and must continually strive to put the interests of their clients ahead of their own. You must also make a continuous effort to maintain a high standard of professional knowledge.

Client Business	All methods of soliciting and conducting business must be such as to merit public respect and confidence. • *Client Orders*: Every client order must be entered only at the client's direction unless the account has been properly constituted as a discretionary or managed account pursuant to the applicable regulatory requirements. • *Trades by Registered and Approved Individuals*: All trades and all acts in furtherance of trades, whether with existing or potential clients, must be effected only by individuals who are registered and approved in accordance with applicable legislation and the rules of the SRO.
Personal Business	All personal business affairs must be conducted in a professional and responsible manner, so as to reflect credit on the individual registrant, the securities firm, and the profession. • *Personal Financial Dealings with Clients*: You should avoid personal financial dealings with clients, including the lending of money to or the borrowing of money from them, paying clients' losses out of personal funds, and sharing a financial interest in an account with a client. Any personal financial or business dealings with any clients must be conducted in such a way as to avoid any real or apparent conflict of interest and be disclosed to the firm, in order that the firm may monitor the situation. • *Other Personal Endeavours*: You must take care to ensure that any other publicly-visible activity in which you participate (such as politics, social organizations or public speaking) is conducted responsibly and moderately so as not to present an unfavourable public image.

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COMPLIANCE

You must ensure that your conduct is in accordance with the applicable SRO rules and regulations.

- **Compliance with the Securities Acts and SRO Rules**: You must ensure that your conduct is in accordance with the Securities Administrators of the province or provinces in which your registration is held. The requirements of the SRO of which your dealer is a member must be observed. You cannot knowingly participate in, nor assist in, any act in violation of any applicable law, rule or regulation of any government, governmental agency or regulatory organization governing your professional, financial or business activities.

CONFIDENTIALITY

All information concerning the client's transactions and his or her accounts must be considered confidential and must not be disclosed except with the client's permission, for supervisory purposes or by order of the proper authority.

Client Information	You must maintain the **confidentiality** of identities and the personal and financial circumstances of your clients. You must refrain from discussing this information with anyone outside your dealer, and must also ensure that the dealer's client lists and other confidential records are not left out where they can be taken or observed by visitors to the office.
Use of Confidential Information	Information regarding clients' personal and financial circumstances and trading activity must be kept confidential and may not be used in any way to effect trades in personal and/or proprietary accounts or in the accounts of other clients.

Case Study | Keeping Karl's Confidence: A Lesson in Proper Conduct (*for information purposes only*)

Sonia, a mutual fund representative at a major Canadian investment firm, has just concluded a meeting with her client Karl. It was her last meeting of the day, and it was a difficult one. She had met with Karl to discuss a major life change, where he advised Sonia that he was getting divorced. It was a very emotional meeting and required a number of important updates to Karl's investment needs and objectives, investment strategy and a thorough analysis of the impact of the changes to his cash flow and tax situations. After the meeting and a long day, Sonia leaves the office looking forward to dinner with her husband, Phil, at a local restaurant.

Over dinner, a tired Sonia relaxes with her husband and begins to discuss her day with Phil. Trusting her husband's opinion, she talks about the meeting with Karl, but is careful not to use the client's name. However, as she becomes more comfortable, she relays a great deal of the details of Karl's situation, even letting the client's name slip a few times. Phil provides his helpful insights, of which Sonia is very appreciative.

The following day, Sonia gets a call from Karl. He is very upset, and complains to Sonia that a friend of his wife's was sitting a few tables over from Sonia and Phil at the restaurant. They overheard Sonia's conversation, and surmised from the details that they were discussing Karl and his wife's situation. They also learned about Karl's financial situation and conveyed all of this to his wife.

Karl tells Sonia that his trust has been violated and that he can no longer rely on her discretion to maintain his privacy. He informs her that he is terminating his relationship with her and her firm and lodging a complaint with her employer.

FIVE PRIMARY ETHICAL VALUES

What are the five ethical values that are central to your role as a mutual fund representative?
Complete the online learning activity to assess your knowledge.

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HOW TO APPLY WHAT YOU'VE LEARNED TO CASE STUDIES

The following two case studies give you an opportunity to apply what you have learned throughout this course. As you work through these cases, try to do your own analysis and come up with recommendations before looking at the analysis presented. You may break down the analysis for each case into the following sections:

- Investment Needs and Objectives
- Personal Circumstances
- Financial Circumstances
- Investment Knowledge
- Risk Profile
- Time Horizon
- Asset Allocation

CASE 1: ROGER BLACK

Roger Black was waiting at the door when your office opened for the day a few minutes ago. He did not seem particularly rushed. He just walked over to the counter and asked if he could speak to someone who could provide him with mutual fund information. The receptionist directed him to you.

Roger explains that he wants to make his annual RRSP contribution, and he is considering investing in one or more mutual funds. You explain to him that you offer a number of different mutual fund investments ranging from money market funds to international, domestic and specialized equity funds.

He explains that he can contribute about $12,000 to an RRSP for this taxation year, and he was thinking of putting it all into units of the Canadian Growth Fund. He has already read parts of the fund facts document and is here to place an order. Roger also mentions that he has $160,000 in mutual funds within an RRSP with a competing firm.

You explain that before you can accept an order, you must ask a number of questions in order to judge the suitability of the proposed investment. You ask if you can start filling out the mutual funds application form. Roger agrees.

Based on the responses to the questions on the form, and to additional questions you have asked, you find that Roger is 34 years old and a marketing professor at a local university. His annual income consists of income from employment of about $70,000 and a small amount from savings deposits and T-bills. He is single but plans to marry in the near future. The couple will likely have two professional salaries.

Roger brought along a breakdown of his investment portfolio. The registered (RRSP) portion of the portfolio consists of the following:

Registered Portfolio	Amount
International equity fund	$21,000
Canadian bond fund	$10,000
Canadian mortgage fund	$8,000
Canadian balanced fund	$5,000
Canadian money market fund	$16,000
Canadian equity fund	$100,000
Total	$160,000

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The non-registered portion consists of the following:

Non-Registered Portfolio	Amount
Asia fund	$6,000
Shares of a small French computer manufacturer	$20,000
U.S. equity small cap fund	$10,000
T-Bills	$4,000
Total	$40,000

In addition, he has about $15,000 in a maturing term deposit, $12,000 of which will go toward his mutual fund RRSP purchase this year.

Roger describes himself as "frugal." He rents a one-bedroom apartment and pays $600 per month. He has a car worth about $10,000. Furnishings, two computers and appliances are worth about $35,000. He has no outstanding loans, and credit card balances are paid off in full every month. He estimates that he has the capacity to save about $1,500 per month.

In response to a question about his level of risk tolerance, Roger replies that he is willing to focus on the long term to a certain extent, but that he tends to become anxious when markets are really volatile. On balance, he considers himself moderately risk tolerant.

Roger has life insurance offered through his university's group benefits program. He is covered for twice his annual salary.

Roger characterizes his investment knowledge as "fair to good."

ANALYSIS — CASE 1: ROGER BLACK

1. INVESTMENT NEEDS AND OBJECTIVES

Roger is investing to add to his RRSP portfolio. On this basis, it is fair to conclude that his investment horizon is long term. However, note that he does not have a house, and virtually all of his assets are financial in nature. According to his age (34), Roger could be in the second life-cycle stage (family commitment years). However, the fact that he is just planning to marry now suggests that he is still in Stage 1.

This raises an important issue. Stage-1 investors may claim to be making RRSP investments for the long-term, but may in fact be only looking for the tax deduction. In reality, they might have given little thought to retirement. In Roger's case, marriage and family responsibilities might lead to a decision to use part of his RRSP portfolio for a down payment on a house. This would make his RRSP investment horizon much shorter than the long-term retirement horizon that his age might suggest.

2. PERSONAL CIRCUMSTANCES

Roger is single but planning to marry in the near future. This puts him at the beginning of Stage 2, or perhaps at the end of Stage 1.

3. FINANCIAL CIRCUMSTANCES

NET WORTH

We calculate Roger's current net worth at about $260,000. Of this net worth, $215,000 is in financial assets. His current asset allocation, considering both tax-deferred and non-tax-deferred investments, is as follows:

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Small cap equity	14%	(computer stock, U.S. small cap)
Equity	60%	(equity funds, Asia fund, half of balanced fund)
Fixed income	10%	(bond fund, mortgage fund, half of balanced fund)
Term deposit and money market funds	16%	
Total	100%	

Note that we included half of the balanced fund as debt and half as equity. This is just a guess for the sake of convenience. In reality, Roger's balanced fund might currently be 70% debt and 30% equity.

Based on the breakdown between equity, fixed income and near-cash assets, this gives an asset allocation of 74% equities, 10% fixed income and 16% near-cash.

There are two things to bear in mind as far as this allocation is concerned. First, Roger has a high percentage (almost 75%) of equities in his portfolio. Equity holdings can be volatile. Second, 26% appears to be a high amount of fixed income and cash (or near-cash) to hold for the long term, but it can certainly be justified if Roger feels that his change in family commitments might lead to a need for liquidity in the near term.

Also of interest in this client's portfolio is the allocation between assets denominated in Canadian dollars versus other currencies. The breakdown, before any additional RRSP investment, is 73% Canadian and 27% foreign.

ANNUAL SALARY

Roger's annual employment income appears to be very secure. This is particularly true if he has tenure at his university. Roger estimates that he can save $1,500 per month. This situation could change with growing family commitments. Recall that Roger's fiancée will also be earning a professional salary. This type of employment often provides good maternity benefits as well.

4. INVESTMENT KNOWLEDGE

Roger has provided an assessment of his level of investment knowledge as "fair to good." Based on the composition of his investment portfolio, we would agree. The high equity component, the fact that he holds individual stocks, and that there is an existing asset allocation all support this view.

5. RISK PROFILE AND TIME HORIZON

After discussions with Roger and his completion of an investor questionnaire, it is clear that he falls in the moderate risk tolerance and risk capacity category. We are assuming in this instance that his investment horizon is long term.

6. ASSET ALLOCATION

Roger has stated an interest in a Canadian growth fund. We will assume that this fund holds 80% of its assets in equities, and these equities are of small- and medium-capitalization firms.

For a moderate risk profile investor, one who does not like a lot of volatility; this might result in too high a weight given to the small-cap equity component of the portfolio. If Roger invests the whole $12,000 in the growth fund, this will raise the small-cap component to 20% of the portfolio (or one-fifth).

An alternative investment is a Canadian equity fund. This would raise the equity component to about 66%. This is perhaps desirable in Roger's case.

There is something else that should be brought to Roger's attention. It appears that he saves money on a monthly basis and then makes his RRSP contribution at year-end. If he made RRSP investments on a monthly basis instead, he would benefit from dollar cost averaging and, at the same time, avoid the additional tax burden resulting from the interest earned on his term deposits.

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CASE 2: JANET CHEN

Janet Chen has made an appointment to see you. You have been in touch with her, off and on, for about a year and a half, but she is not really a client because she has not invested any money using your services. She is the type of person who wants to know all of the details but seems to have a lot of trouble making a decision. You have found her frustrating to deal with.

You have never known Janet to smile, but today she is beaming. The reason, you discover, is that about one month ago she won $80,000 (tax-free) in a provincial lottery. She wishes to consult with you about how to invest her windfall.

You direct Janet into an office and begin by asking if she has thought about what she would like to do with the money. She replies that she wants to pay off the remaining mortgage on the house, but other than that, she wants to invest it for the longer term. She explains that there is no pension plan where she works. As a result, she is concerned about her retirement. She has read a lot about mutual funds lately and she knows that your dealer offers a number of them. She is not sure if they are suitable for her and would like your advice.

You begin by explaining that mutual funds are generally riskier than the savings deposits she has made in the past. You explain that the values of most types of mutual funds fluctuate from day to day and mutual fund investments are not covered by deposit insurance. However, over the longer term, the greater risk should translate into greater returns. But there is no guarantee that this higher return will materialize.

She says that she understands what you have explained and would like to know if she is a candidate for any of the funds you offer. You explain that you need to consider a number of factors before you can make any recommendations and that a good place to begin is with the account application form.

From the details provided in the account application form, from other discussions you have had with her today, and from notes you made in previous contacts with her, you have the following information: Janet is 43. She and her husband have two children aged 19 and 15. Janet is the manager of a women's apparel store. She has held that job for six years and currently earns $58,000 per year. Prior to assuming the manager's position, she was assistant manager; in fact, she started at the same store 20 years ago as a sales assistant and has worked her way up.

Her husband's income has not been very stable over the last few years. He was injured on a construction job and for the last year has been receiving workers' compensation benefits of $1,400 per month. Prior to his injury, his employment was not very stable. He changed jobs often and was unemployed for a good part of every year. At 49, it is difficult for him to find steady work. You recall from previous discussions with Janet that it embarrasses her to discuss this aspect of the family's situation.

Janet, her husband and their younger child live in a small house. The older child is away for most of the year at university in another province. Janet estimates the value of the house at $220,000. There is a mortgage of $20,000, which Janet intends to pay off with part of the lottery winnings. There are no other outstanding loans or liabilities. Janet has run the household with a good control on spending, given the family's tenuous financial situation.

When asked about her investments, she answers that all of her $19,000 RRSP holdings are in a one-year RRSP GIC. She has about $3,000 in a chequing/savings account held at a bank. Since she has not always contributed the maximum allowable amount to an RRSP, for this taxation year she may contribute up to $15,000. She has a life insurance policy with a $10,000 death benefit. Janet's husband has no RRSP, other savings or life insurance.

When asked about living expenses, Janet says that she manages adequately with her salary, plus whatever her husband brings in. Her mother-in-law thinks that some of the windfall should go into a savings vehicle to fund the children's university education, but Janet believes that her kids should pay for most of their education. She is willing to help out but only in a minor way.

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ANALYSIS — CASE 2: JANET CHEN

1. INVESTMENT NEEDS AND OBJECTIVES

Janet and her husband are old enough to be in Stage 3 of the life cycle (the mature earning years), but because of her husband's job difficulties, they might never leave Stage 2. Janet's income is not high enough to warrant having tax minimization as a key objective. However, like many Stage-3 investors, Janet is concerned about her financial position in retirement.

Note that the windfall does not necessarily result in a change in her objectives, possibly because it is not a huge amount like $2 million or $5 million.

2. PERSONAL CIRCUMSTANCES

Janet is a Stage-3 client from the perspective of family responsibilities. One child is already out of the house and the other should be in a few years. Whatever financial demands the children currently make, they will decline as time goes on. Her husband's employment picture is a problem for this family, since they could save much more with an additional steady and solid income. The windfall will help to a certain extent, since it replaces savings that would have otherwise been accumulated by the household.

Janet seems not too confident about her ability to make good investment choices. It is important to understand if Janet's lack of confidence is a result of a lack of knowledge about investments generally, or because of a high level of risk aversion. You can inform and educate, but you cannot make a psychologically risk-averse person more risk tolerant.

3. FINANCIAL CIRCUMSTANCES

NET WORTH

Janet and her husband have a net worth, including the $80,000 windfall, of $332,000. To arrive at this number, we add to the $80,000 windfall the value of the house ($220,000), assume about $30,000 of other assets including a car and furnishings, and include RRSP funds of $19,000 and $3,000 cash. We subtract the $20,000 outstanding balance on the mortgage. Of this net worth, $230,000 is in fixed assets (i.e., the house, furnishings and car). The remainder is made up of the windfall, RRSP funds and cash. The asset allocation is currently 100% cash or near-cash assets.

ANNUAL SALARY

As indicated above, the current annual income made up of Janet's salary and her husband's compensation benefits is adequate. We could assume that Janet's salary is secure given her long association with the company. But the retail clothing industry is fickle. Also, Janet provides the principal source of the family's income. The loss of this income would put the family in a very difficult position.

4. INVESTMENT KNOWLEDGE

Janet's level of investment knowledge is low.

5. RISK PROFILE AND TIME HORIZON

We know from her current asset allocation (ignoring the windfall) that Janet has not sought out riskier investments in the past. There is little to indicate whether this is from a lack of investment knowledge, a lack of savings to invest, or high-risk aversion. In cases like this, the mutual fund sales representative must make the client aware of the nature of investment risk. The key concern here is Janet's salary as the principal income source. This leads us to some concern for liquidity than would normally be the case for families with either two income sources or one very secure and substantial source. If Janet's husband found full-time, permanent employment, liquidity would be less of a concern.

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After completing an investor questionnaire, you note that Janet scored higher on the risk tolerance questions than you expected, based on your conversations with her and given her investment history. However, she scores lower on risk capacity. This makes sense, given a variety of questionnaire factors including her age, her annual salary, her type of employment, and her family's overall financial situation. Since she scored lower on risk capacity compared to risk tolerance, her lower risk capacity contributes to your determination that she falls into the conservative investor profile.

In terms of time horizon, Janet has her mind set on long term savings.

6. ASSET ALLOCATION

Given the single income source and limited savings, plus doubts about the client's ability to psychologically tolerate investment risk and her responses to risk capacity questions, we would tend to weight the allocation toward more liquid investments.

One allocation that might work here would be to leave the RRSP funds in GICs. Of the $60,000 remaining windfall (after $20,000 goes to pay off the mortgage), $10,000 could go into a Canadian Money Market fund, $10,000 could go into a Canadian Dividend and Income Equity fund, $20,000 into a Canadian Short Term Fixed Income fund, and $20,000 into a Canadian Long Term Fixed Income fund.

This would give an asset allocation of 39% cash or near-cash, 49% fixed income and 12% equity. Since Janet can contribute $15,000 to an RRSP this year, it would be best to hold $15,000 of the $20,000 bond fund within the plan. The highest interest income is likely to come from the bond fund, and since interest income is fully taxable, it should be sheltered from current taxation as much as possible.

This allocation is conservative. If Janet feels that she can tolerate more risk based on your explanation, you might suggest a small cap or growth equity fund component (5%). A conservative international equity fund might be helpful for additional diversification. The key for Janet is the need for relatively high liquidity.

Janet is an excellent candidate for an asset allocation service that constructs an optimized portfolio of mutual funds based on responses to the questionnaire and then periodically rebalances the portfolio. Many dealers offer this service and some require that when mutual fund sales representatives give advice, they restrict that advice to the recommendations provided by the asset allocation program.

PUTTING IT ALL TOGETHER

Can you analyze two additional case studies online and answer the multiple-choice quiz questions that accompany the cases? *Complete the online learning activity to assess your knowledge.*

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SUMMARY

After reading this chapter, you should be able to:

1. Summarize the roles of ethical decision-making and the standard of conduct in building trust and confidence within the securities industry.
   - The five primary ethical values are:
     - Duty of care (know your client, due diligence, unsolicited orders).
     - Integrity (acting with trustworthiness, honesty and fairness with a focus on priority of client interests, protection of client assets, complete and accurate information, disclosure).
     - Professionalism (client business, personal business, continuous education).
     - Compliance (compliance with securities acts and SRO rules, inside information).
     - Confidentiality (client information, use of confidential information).
2. Apply what you have learned throughout this course to various client scenarios.

REVIEW QUESTIONS

Now that you have completed this chapter, you should be ready to answer the Chapter 18 Review Questions.

FREQUENTLY ASKED QUESTIONS

If you have any questions about this chapter, you may find answers in the online Chapter 18 FAQs.

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Glossary

A

account closing fees
A charge levied by some mutual funds when clients close their accounts.

accredited investor
An individual or institutional investor who meets certain minimum requirement relating to income, net worth, or investment knowledge. Also referred to as a sophisticated investor.

accumulation plan
A plan offered by a mutual fund company that enables investors to make automatic periodic purchases of units of a particular mutual fund.

acquisition fee
See Front-end Load.

active portfolio management
An investment management style employed by managers who believe that financial markets present occasional inefficiencies which can be exploited to earn excess returns. Proponents of this approach will try to add value through strategies such as market timing and individual security selection.

adjusted cost base
The deemed cost of an asset representing the sum of the amount originally paid plus any additional costs, such as brokerage fees and commissions.

administrative bodies
Provincial and territorial securities administrators such as securities commissions or other regulatory bodies that operate within the provincial and territorial governments. Powers and operations include registration, disclosure, and investigation and prosecution.

alpha
A statistical measure of the value a fund manager adds to the performance of the fund managed. If alpha is positive, the manager has added value to the portfolio. If the alpha is negative, the manager has underperformed the market.

alternative managed products
Professionally managed portfolios of basic asset classes and/or commodities and include segregated funds, hedge funds, commodity pools, exchange-traded funds, income, trusts, closed-end funds and principal protected notes (PPN).

amortization
Gradually writing off the value of an intangible asset over a period of time. Commonly applied to items such as goodwill, improvements to leased premises, or expenses of a new stock or bond issue.

amortization period
The period during which the entire principal amount of a mortgage loan is to be repaid to the mortgagee.

amortized cost
This cost reflects the fact that mortgages might have entered the portfolio when the market rate for them was different from their fixed rate.

Annual Information Form (AIF)
A document that contains information not included in a simplified prospectus or annual financial statements.

annuitant
The person on whose life insurance benefits are based.

annuity
A sum of money invested with a life insurance company that is paid out to the investor based on a predetermined formula. The annual payouts are composed of both the initial amount invested and returns generated.

appraisal firms
Firms that engage in the business of collecting mutual fund performance information and report this information on a regular basis.

arbitrage transactions
The simultaneous purchase and sale of securities traded on different exchanges.

arithmetic mean
A somewhat inaccurate method of calculating average annual return. It involves adding up the annual returns and dividing by the number of years.

arrears
Interest or dividends that were not paid when due but are still owed. For example, dividends owed but not paid to cumulative preferred shareholders accumulate in a separate account (arrears). When payments resume, dividends in arrears must be paid to the preferred shareholders before the common shareholders.

ask price
The lowest price at which a seller will accept for the financial instrument being quoted.

asset allocation
The weight of the various components (cash, debt, equity, and money market securities) of an investor's portfolio.

assets
All things of value that are owned by a firm or individual.

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assets under management (AUM)
The assets managed by an investment firm.

auction market
Market in which securities are bought and sold by brokers acting as agents for their clients, in contrast to a dealer market where trades are conducted over-the-counter. For example, the Toronto Stock Exchange is an auction market.

audit
A professional review and examination of a company's financial statements required under corporate law for the purpose of ensuring that the statements are fair, consistent and conform with International Financial Reporting Standards (IFRS).

auditor's report
An independent report on the accuracy and validity of a company's financial statements.

Autorité des marchés financiers (AMF)
The body that administers the regulatory framework surrounding Québec's financial sector: securities sector, the distribution of financial products and services sector, the financial institutions sector and the compensation sector.

availability bias
A method that allows people to estimate the probability of an outcome based on how prevalent or familiar that outcome appears in their lives.

average
A statistical tool used to measure the direction of the market. The most common average is the Dow Jones Industrial Average.

average annual return
The average of the simple annual returns earned on an investment over a given number of years.

B

balance of payments
Accounts maintained by a country to record international activities, such as foreign trade and international borrowing and lending. Balance of payments accounts actually comprise two separate accounts: the Current account and the Capital account.

balanced mutual funds
Hold a diversified portfolio of different types of securities: bonds, stocks, and money market securities. Often, the fund manager will vary the proportions depending on market conditions.

bank rate
The minimum rate at which the Bank of Canada will lend money on a short-term basis to the chartered banks and other members of Payments Canada in its role as lender of last resort.

basis point
A unit equal to 1/100 of 1%.

bear market
A sustained decline in equity prices. Bear markets are usually associated with a downturn (recession or contraction) in the business cycle.

bearer bond
A bond that is not registered in the name of a particular investor and can be negotiated by any holder.

behavioural biases
Systematic errors in financial judgment or imperfections in the perception of economic reality.

behavioural finance
A field of study that combines psychology and economics to explain why and how investors act and how that behaviour affects financial markets.

benchmark
An index or fund that enables you to compare the success of a fund or portfolio manager.

benchmark index
An index that reflects a mutual fund's investment universe and can be used as a standard against which performance can be measured.

beneficiary
The person who will receive the benefits payable under the contract upon death of the annuitant.

best practical allocation
An asset allocation where the risk and return levels are adjusted based upon a client's behavioural tendencies. A best practical allocation may slightly underperform over the long term, but is an allocation that the client can comfortably adhere to over the long run.

beta
The standard measure of market risk. It shows how much a security or a portfolio fluctuates when the market as a whole fluctuates.

biases
Personal beliefs that may lead to irrational or emotional choices and decisions.

bid price
The highest price at which a buyer will pay for the financial instrument being quoted.

board of directors
Those that hold the ultimate responsibility for a mutual fund's activities, ensuring that the investments are in keeping with the fund's investment objectives.

bond
A bond is a debt security that may be issued by either a government or a corporation. The issuer of a bond promises to pay a stipulated rate of interest (coupon rate) and to pay back the principal or par value at maturity.

bond fund
A fixed-income fund that invests principally in government and corporate bonds.

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Branch Compliance Officer (BCO)
The person responsible for ensuring compliance with the regulatory requirements within the branch by monitoring the conduct of the mutual fund salespeople.

bull market
A general and prolonged rising trend in security prices. Bull markets are usually associated with an expansionary phase of the business cycle. As a memory aid, it is said that a bull walks with his head up while a bear walks with his head down.

business cycle
The series of short-term fluctuations of national income over definite periods.

C

call
A call feature allows the issuing corporation to redeem, or pay back, the bondholders before the stated maturity date. Also known as a redemption.

call option
Gives its owner the option of buying shares at the fixed exercise price prior to the call's expiration date.

call premium
Is measured by the difference between a security's par value and the price the issuer must pay to call it for retirement.

Canada Education Savings Grants (CESG)
An incentive program for those investing in a Registered Education Savings Plan (RESP) whereby the federal government will make a matching grant of a maximum of $500 to $600 per year of the first $2,500 contributed each year to the RESP of a child under age 18.

Canada Pension Plan (CPP)
A government sponsored pension plan to which all employed residents in Canada (except Québec) contribute. Contribution to the plans is automatic. Starting from age 65, pensioners receive a modest monthly amount.

Canadian Investor Protection Fund (CIPF)
The CIPF protects eligible customers in the event of the insolvency of a dealer member. It does not cover client losses that result from changing market values, nor does it insure accounts held at a banks or any other firm that is not a CIPF member.

Canadian Investment Funds Standards Committee (CIFSC)
The body that oversees mutual fund classification. The CIFSC tracks investment funds on a security-by-security holdings basis.

Canadian Investment Regulatory Organization (CIRO)
CIRO is the self-regulatory organization that oversees the trading activity of all investment dealers and mutual fund dealers in Canada. CIRO carries out its regulatory responsibilities through setting and enforcing rules regarding the proficiency, business, and financial conduct of investment dealers, mutual fund dealers, and their registered employees, and through setting and enforcing market integrity rules regarding trading activity on Canadian marketplaces.

capital
Has two distinct but related meanings. To an economist, it means machinery, factories and inventory required to produce other products. To an investor, it may mean the total of financial assets invested in securities, a home, and other fixed assets, plus cash.

capital and financial account
One of the two accounts of the balance of payments that records the flow of payments between countries to finance the acquisition of assets such as stocks, bonds and real estate.

capital gain
When an investor sells an asset for more than its purchase price, a capital gain is realized. Only 50% of capital gains is taxable; 50% remains tax free.

capital growth
An investment with this return objective will have an appreciable level of risk and will be expected to increase in value over the long term. See also Capital Gains.

capital loss
Selling a security for less than its purchase price. Capital losses can only be applied against capital gains. Surplus losses can be carried forward indefinitely and used against future capital gains. Only 50% of the loss can be used to offset any taxable capital loss.

career average plan
Pension is calculated as a percentage of an employee's earnings over the course of her career (while in the plan). Employees may contribute a fixed percentage of their salary (such as 5%) to this type of plan. Employer contributions required to fund the defined benefit vary according to factors such as investment yield, mortality and employee turnover.

carry forward
In the case of RRSPs, it refers to unused contribution room that can be used to reduce taxable income in future periods. In general, unused contributions can be carried forward indefinitely.

cash account
An account in which no borrowing is permitted.

cash flow
The amount of money coming in from all sources of income and the amount of money going out to pay bills.

cash flow from operations/total debt ratio
A ratio that gauges a company's ability to repay the funds it has borrowed. Cash flow/total debt ratio = cash flow / total debt.

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cash management
A central bank process of controlling the national money supply through the buying or selling of bonds in the market.

Chambre de la sécurité financière
The Chambre is responsible for setting and monitoring continuing education requirements and for enforcing a code of ethics in the province of Quebec.

client name account
The opposite of a nominee account. A client name account is an account registered directly in the name of the client of the account with the mutual fund.

client service
This involves fully understanding and satisfying the unique needs of each client.

closed mortgage
Can often be repaid prior to the end of the term, but a penalty will apply.

closed-end discretionary funds
Funds that have the flexibility to buy back their outstanding shares periodically.

closed-end fund
Shares of these funds are bought and sold on the open market. A fixed number of shares are issued and their value depends on market demand and on the value of the securities held by the fund.

code of ethics
A code that establishes norms based upon the principles of trust, integrity, justice, fairness, honesty, responsibility and reliability.

cognitive bias
Basic statistical, information processing or memory errors that are common to all human beings. They can be thought of also as "blind spots" or distortions in the human mind.

coincident indicators
Economic indicators that behave similarly and simultaneously with the economy. Coincident indicators help economists to determine which phase of the business cycle an economy is currently in. Examples include gross domestic product (GDP), personal income, and retail sales.

collateral
Secures a bond by a pledge of an asset in the case of default.

commercial paper
A short-term debt security whose issuer promises to pay the maturity value by a stated date. Commercial paper is issued by very creditworthy companies and is therefore quite liquid.

common shares (common stock)
A common share is said to represent residual ownership of the issuing company and is therefore entitled to a vote at shareholder meetings. It does not have a stated maturity date and is only paid dividends once preferred shareholders have been paid.

comparison universe
A collection of portfolios that form the basis for comparison.

compliance
Following the rules, whether those rules are legal requirements or dealer policies.

compounding
The effect of reinvesting (rather than spending) the returns on an investment, so that investors earn a "return on a return".

concentration risk
ETFs are not subject to individual stock or sector exposure limits that normally are part of a mutual fund's investment objective. If particular sectors have had extraordinarily large gains, then it is possible for the ETF to be highly concentrated in a single stock (in excess of 10%) or sector (in excess of 40%).

confidentiality
All information concerning the client's transactions and his or her accounts must be considered confidential and must not be disclosed except with the client's permission, for supervisory purposes or by order of the proper authority.

consumer price index (CPI)
A measure of the average of the prices paid for a basket of goods and services compared to a base year.

contract holder
The owner of a segregated fund contract.

contraction
The phase of the economic cycle that follows the peak. During a contraction, economic activity declines.

contractionary
A monetary policy that seeks to reduce the size of the money supply.

contribution in kind
Transferring securities into an RRSP. The general rules are that when an asset is transferred there is a deemed disposition. Any capital gain would be reported and taxes paid. Any capital losses that result cannot be claimed.

contribution room
If you do not contribute the maximum allowable amount to your RRSP in any given year, you can carry forward the unused contribution indefinitely to future years. The contribution room is the annual unused contribution carried forward.

conventional mortgage
When the amount of the mortgage loan does not exceed 80% of the appraised value of the pledged property.

convertible bond
Can be converted to a given number of common shares, generally of the same company. Conversion is usually permitted during periods determined by the issuer or the issuer can force conversion if market conditions warrant it.

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corporate bonds
Are issued by corporations mainly to finance the acquisition of equipment. They are subject to interest rate risk but, unlike government bonds, are also subject to default risk. Often, specific assets are pledged as collateral to guarantee repayment of the debt.

correlation
A statistical measure of the degree to which the returns on a security are associated with the returns on another security.

cost-push inflation
A type of inflation that develops due to an increase in the costs of production. For example, an increase in the price of oil may contribute to higher input costs for a company and could lead to higher inflation.

coupon
The promise made by the bond to make semi-annual payments to the bondholder.

coupon rate
The periodic (almost always semi-annual) interest payment that the issuer of a bond has promised to pay the bondholder.

credit rating
The grading of a company based on the company's ability to pay back credit. A high credit rating means that the company is very likely to pay back loans and is not a default risk.

cumulative
A preferred stock having a provision that if one or more of its dividends are not paid, the unpaid dividends accumulate in arrears and must be paid before any dividends may be paid on the company's common shares.

currency
The money used as a form of payment by a country.

currency forward contract
A contract between two parties that locks in the exchange rate for the purchase or sale of a currency on a future date.

current account
One of the two accounts of the balance of payments that records the net trade of goods and services, net payments of interest abroad and net transfers between countries.

current assets
Are assets that are expected to be converted to cash within one year. Cash or cash equivalents are also considered current assets.

current income
Earned from fixed-income funds that make regular interest or dividend payments to the holder. Generally, an investor seeking current income has the intention of living off the proceeds.

current liabilities
Are liabilities that are expected to be settled within one year.

current ratio
A liquidity ratio that is calculated by dividing a firm's current assets by its current liabilities.

current yield
Is computed by dividing the coupon or dividend payment for one year by the current market price of the security. The current yield is used to compare the short-term return on different securities. For a money market mutual fund, it is the last seven days' annualized yield; it does not assume compounding of returns.

custodian
Handles the disbursement and receipt of funds as well as the safekeeping of the securities. This function is performed by a trust company or bank.

cyclical unemployment
The type of unemployment that rises when the economy weakens and falls when it recovers.

D

dealer market
A market in which securities are bought and sold over-the-counter in which dealers acts as principals when buying and selling securities for clients. Also referred to as the unlisted market.

death benefits
In a segregated fund, the contract holder's beneficiary or estate is guaranteed to receive payouts amounting to at least the original premiums invested by the contract holder, excluding sales commissions and certain other fees. The amount of the death benefit is equal to the difference, if any, between the net asset value of the fund and the original amounts invested.

debentures
Are bonds that have no assets pledged as collateral in the case of default.

debt instruments
Money borrowed from lenders for a variety of purposes. The borrower typically pays interest for the use of the money and is obligated to repay it at a set date.

debt security
A debt security, such as a bond, evidences a loan which has been made by the investor to the issuer. The issuer of a debt security essentially borrows money from the investor and thereby incurs a debt.

debt/equity ratio
A financial leverage ratio that determines the relationship of debt to equity.

declaration of trust
A legal document establishing the fund's structure, indicating its principal investment objectives, investment policy, any restrictions on the fund's investments, who the fund's trustee, manager and custodian will be, and the classes or series of units the fund may have, among other things.

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deemed disposition
Under certain circumstances, taxation rules state that a transfer of property has occurred, even without a purchase or sale, e.g., there is a deemed disposition on death or emigration from Canada.

default risk
This is the risk that a mortgage, bond, or preferred share will not make its anticipated interest or dividend payment, or principal will not be repaid at maturity (in the case of mortgages and bonds).

defined benefit plan
A type of employer-sponsored pension plan that allows the employee to determine the amount of the eventual pension benefits with relative accuracy. Generally, the benefits are a given percentage of the employee's salary and are often based on the number of years of service.

defined contribution (money purchase) plan
A type of employer-sponsored pension plan that does not allow the employee to determine the amount of the eventual pension benefits in advance. The benefits received depend on how successfully the contributions have been invested over the years. The employee and the employer both contribute to the plan.

deflation
A decrease in the general price level of goods and services in a country. Deflation occurs when the inflation rate falls below 0%.

demand
The tendency of consumers to buy more of a good when its price decreases and less when its price increases.

demand-pull inflation
Inflation that occurs when demand in an economy outpaces supply.

deposit-taking institution
Companies, such as banks and trust companies, that pool the deposits of thousands of savers and then invest those funds in different types of investments.

depreciation
The amount by which the value of fixed assets is periodically decreased to reflect the effects of regular wear and tear.

derivatives (derivative securities)
A security whose value is determined by the value of some other security or asset. An example of a derivative would be an option or a future.

direct distribution
A mutual fund company that has its own centralized order-taking department and sales staff is said to engage in direct distribution.

directional strategies
Hedge fund strategies that bet on anticipated movements in the market prices of equities, debt securities, foreign currencies, and commodities.

disclosure
Includes insider reports, regular corporate financial reports, timely disclosure of material changes in the affairs of a company and examination of all prospectuses to ensure that there is full, true, and plain disclosure. Proper disclosure allows investors to make informed choices.

discount
Occurs when the price of a mutual fund is below its net asset value.

discouraged workers
Individuals that are available and willing to work but cannot find jobs and have not made specific efforts to find a job within the previous month.

discretionary funds
Savings that are not needed for day-to-day living.

discretionary income
The amount of money coming in from employment and other sources minus the amount of money going out to pay bills.

discretionary trading
Any purchase or sale where the sales representative determines the timing and/or price of a sale or purchase.

disinflation
A decline in the rate at which prices rise – i.e., a decrease in the rate of inflation. Prices are still rising, but at a slower rate.

diversification
The process of reducing investment risk by investing in different types of securities issued by companies active in different industries. Ideally, these securities will not all have the same response to economic and other events — as some decrease, others will hopefully increase.

dividend fund
A type of fixed-income fund that holds dividend paying common shares and possibly preferred shares. Dividend funds are distinguished from preferred dividend funds by the fact that they tend to hold mostly common shares.

dividend income
The dividends received from an investment in common and preferred shares.

dividend tax credit (DTC)
Refers to the preferential tax treatment granted to dividend income (common and preferred) received from taxable Canadian corporations. The dividend is grossed up by 38% and the tax credit of 15.02% is calculated based on this amount.

dividend yield
Dividends earned during ownership of shares.

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dollar cost averaging
Involves periodically (e.g., monthly) purchasing a fixed dollar amount of mutual fund units. As the unit price fluctuates, so will the number of units purchased. By investing regular dollar amounts in an increasing market, the average cost per unit tends to be lower over the long run.

drawdowns
A transfer of deposits from the chartered banks to the Bank of Canada.

dual employment
Persons that are dually registered as mutual fund sales representatives and life insurance agents.

duration
A measure of a bond or a bond portfolio's sensitivity to changes in interest rates. The higher (lower) the duration, the greater (smaller) the change in the value of a bond in response to a given change in interest rates.

duty of care
A legal obligation imposed on mutual funds representatives requiring that they adhere to a standard of care while performing any acts that could foreseeably harm others.

E

earned income
For an individual, it includes all income from employment but it excludes income from investments and any pension or unemployment benefits received.

earnings per common share (EPS)
A shareholder ratio that is calculated by dividing net income by the number of common shares outstanding. Shareholders like to see consistent increases in EPS over time.

economic indicators
These are a group of statistics that provide information about the direction and level of activity of the economy.

economics
A social science that is concerned with an understanding of production, distribution, and consumption of goods and services.

effective yield
In the case of money market mutual funds, this calculation makes the assumption that the yield generated over the last seven days will remain constant for one year into the future. It assumes weekly compounding of returns at that rate.

efficient
If markets are efficient, the prices of securities reflect all the information that exists about them.

efficient market
The prices of stocks or securities reflect all of the information that may exist about those stocks or securities.

electronic commerce (e-commerce)
Business activities, such as purchasing, distribution, sales, and other transactions, that take place by means of advanced communications and computer technologies.

electronic document
Data recorded or stored in a computer system or other similar device and that can be read or perceived by a person or a computer system or other similar device. This includes displays, printouts, and other output of that data.

electronic signature
A signature in digital form that is incorporated in, attached to, or associated with an electronic document.

emotional bias
The opposite illogical or distorted reasoning. An emotion is a mental state that arises spontaneously, rather than through conscious effort. Emotions are physical expressions, often involuntary, related to feelings, perceptions or beliefs about elements, objects, or relations between them, in reality or in the imagination.

Endowment bias
People who are subject to endowment bias place more value on an asset they hold property rights to than on an asset they do not hold property rights to.

enforcement
Securities Administrator enforcement may include investigating and prosecuting offenders who violate securities regulations. Securities administrators have the authority to subpoena witnesses, seize documents for examination and operate as administrative tribunals. The securities administrators may also prosecute a violator in the courts, which may result in imprisonment and/or substantial fines.

equilibrium price
The price at which the quantity demanded equals the quantity supplied.

equities (equity instruments)
An investment instrument that provides an ownership stake in a company.

equity growth fund
This type of fund seeks out smaller firms that are expected to pay little or no dividends and to produce significant capital gains as their share prices increase. As a result, equity growth mutual funds tend to have a lot of volatility and are suitable for investors with higher risk tolerance.

equity index fund
Has the primary goal of earning capital gains by constructing a portfolio designed to mimic a particular stock market index — often the S&P/TSX Composite Index in Canada.

equity mutual fund
Seeks to earn some combination of current dividend income and capital gains. It generally invests in common shares of larger firms with strong dividend records and limited capital gains potential.

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ethical conduct
The conduct of complying not only with the letter of the law but also with the spirit of the law.

ethical decision-making
Decision-making based on the principles of trust, integrity, justice, fairness, honesty, responsibility, and reliability.

ethical responsibility
The responsibility of the investment guide to ensure that the client's needs are respected and placed before the guide's own needs (e.g., attaining a sales target) and those of the employer.

ethics
The moral principles that go beyond prescribed behaviour and addresses situations where rules are unclear or contradictory.

event-driven strategies
Hedge fund strategies that seek to profit from unique events such as mergers, acquisitions, stock splits and stock buybacks.

excess returns
The possibility of returns above those needed to compensate for the risk of an investment. Undervalued stocks offer the possibility of excess returns.

exchange rate
The price at which one currency exchanges for another.

exchange rate risk
The risk that an unexpected change in exchange rates will alter the value of foreign assets or cash payments expected from a foreign source. This type of risk applies to global mutual funds. See also Foreign Exchange Risk.

exchange-traded funds (ETFs)
Baskets of securities traded like individual stocks on an exchange. ETFs are similar to index mutual funds in that they will primarily invest in the equities of companies that compose the target index, but the way in which an ETF is structured allows it to be far more tax efficient than an index mutual fund.

expansion
The phase of the economic cycle that follows the trough. During an expansion, economic activity increases.

expansionary
A monetary policy that seeks to increase the size of the money supply.

explicit costs
Costs that are directly borne by the investor. They fall into three categories: management fees, operating expenses, and sales charges.

extra dividend
A dividend paid in addition to the regular dividend.

F

fairness
All relevant information that might have an impact on an investor's decision to buy or to sell must be fully disclosed.

final average plan
Bases the pension on an employee's length of service and average earnings over a stated period of time. Often this is the average of the best five consecutive years of earnings in the last 10 years of employment, or the average of the best three consecutive years of earnings over the last five years of employment.

final good
A finished product that is purchased by the ultimate end-user.

Financial Action Task Force (FATF)
An inter-governmental body whose purpose is to develop and promote national and international policies to combat money laundering and terrorist financing.

financial circumstances
Include the size of the client's investment portfolio, employment and investment income, whether the source of employment income is secure, and the level of periodic expenses incurred.

financial goals and objectives
A client's reasons for selecting a given investment. May be expressed in terms of the types of desired returns (e.g., growth, interest income) or in terms of desired investment characteristics such as safety or liquidity.

financial intermediaries
Suppliers and users of capital access the markets through the chartered banks, trust companies, life insurance companies, and investment dealers. These financial intermediaries can be either deposit-taking or non-deposit-taking institutions.

financial market
The mechanism through which suppliers and users of capital are matched.

financial planner
A professional holding a recognized designation (CFP, ChP or PFP) who assists clients in establishing and reaching financial goals by analysing current finances and making recommendations on reaching financial goals. The Mutual Funds Sales Representative is not expected to play the role of financial planner.

financial planning pyramid
A visual aid that can be used to help build a financial plan and prioritize decision making around asset choices.

financial statement analysis
The process of examining and working with the firm's financial accounting information in order to assess value and financial soundness.

first-order risks
Risks associated with the direction of interest rates, equities, currencies and commodities. Broadly speaking, it refers to market-induced risk, or systematic risk.

fiscal policy
A deliberate action by a government (federal, provincial or territorial) to influence the economy through changes either in spending or in taxation initiatives.

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fiscal year
A company's accounting year. Due to the nature of particular businesses, some companies do not use the calendar year for their bookkeeping. A typical example is the department store that finds December 31 too early a date to close its books after the Christmas rush and so ends its fiscal year on January 31.

fixed assets
Are those assets that are expected to last longer than one year.

fixed-dollar (constant) withdrawal plan
A type of systematic withdrawal plan that allows investors to receive a periodic fixed amount of money through the redemption of units of their mutual fund.

fixed-income funds
Consist of fixed-income securities. Fixed-income funds share the goal of generating current income.

fixed-income securities
Are securities that generate predetermined periodic interest or dividend income. They include government and corporate bonds, mortgages, and preferred shares.

fixed-period withdrawal plan
A systematic withdrawal plan that allows the mutual fund investor to receive money such that over a specified period the mutual fund will be completely paid out.

flat benefit plan
An employee's monthly pension is a specified number of dollars for each year of service.

forecast
To estimate the cash flow to be earned during the year as well as the price you think that you could sell a security for at the end of the year.

foreign exchange risk
The risk that an unexpected change in exchange rates will alter the value of foreign assets or cash payments expected from a foreign source. This type of risk applies to global mutual funds.

foreign investors
Retail or institutional investors who reside outside of a country, but invest in that country.

frequent trader
Individuals who buy and sell mutual fund units actively, sometimes holding positions for as little as one day.

frequent trading charge
Is assessed by some mutual funds to discourage investors from redeeming their units shortly after purchase or from switching between funds.

frictional unemployment
The result of the labour turnover in a normal, healthy economy, where people enter and leave the workforce and jobs are created and terminated.

front-end load
A sales fee that the investor pays when the fund is purchased. This fee is generally not charged by banks or trust companies and is based on the dollar value invested.

fund distributors
Represents the link between a mutual fund and the investing public. A fund's distributor is often its investment company.

fund facts
A short mutual fund document designed to give investors key information that is relevant to their investment decisions, including facts about the fund itself, performance history, investments, and the costs of investing in the fund.

fund manager
Provides day-to-day supervision of the fund's investment portfolio.

fund of funds
The investor owns units of a pool of mutual funds.

fund sponsor
The mutual fund investment firm.

fund wrap
A program that provides a series of portfolios with multiple mutual funds to reflect pre-selected asset allocation models. It can be a fund of funds or a portfolio allocation service.

fundamental analysis
Security analysis that attempts to determine the true or intrinsic value of a security by examining the fundamentals such as sales, earnings, economic changes, competitive forces, and management.

futures contract
A transferable agreement to deliver or take delivery of a fixed quantity of an asset for a specific price by a specific future date.

G

geometric mean
A calculation that determines the average compound return over several time periods.

glide path
A formula that defines the change in the asset allocation mix of a target date fund over time, based on the number of years remaining to the target date. The closer the target date, the more conservative the asset mix.

global equity funds
A type of global mutual fund that earns dividends and capital gains.

global mutual funds
These funds offer international diversification by investing in the economies of specific countries or regions anywhere in the world, including Canada.

government bond
A debt security that is issued by the federal, provincial, and municipal governments in order to finance public spending. These bonds trade OTC, they have a wide range of maturities, and they are considered to have little or no default risk.

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gross domestic product (GDP)
The market value, in current dollars, of all goods and services produced within a country in one year. GDP includes the value of all goods and services produced by Canadian citizens and foreigners living in Canada and does not include the value of goods and services produced by Canadian citizens and businesses abroad.

gross profit
The excess of sales revenues over the costs that were incurred to produce or acquire the goods that were sold.

gross profit margin ratio
An operating performance ratio that shows the company's rate of profit after allowing for cost of goods sold.

growth at a reasonable price (GARP)
A value approach to buying earnings growth. GARP managers, like growth managers, seek companies with projections of growing earnings and high and increasing ROEs (return on equity) relative to the industry average. Unlike growth managers, GARP managers avoid stocks with high P/Es (price/earnings ratios) and P/Bs (price-to-book ratios).

growth investing
A form of equity investing that is more concerned about the future prospects of a firm than its present price.

Guaranteed Investment Certificate (GIC)
A deposit instrument most commonly available from trust companies, requiring a minimum investment at a predetermined rate of interest for a stated term. Generally nonredeemable prior to maturity but there can be exceptions.

guaranteed minimum withdrawal benefit plan
A GMWB plan is similar to a variable annuity. With a GMWB, the client purchases the plan, and the GMWB option gives the planholder the right to withdraw a certain fixed percentage (7% is typical) of the initial deposit every year until the entire principal is returned, no matter how the fund performs.

H

hard retraction
With a hard retraction feature, the company must pay any redemption value in cash.

hedge funds
Lightly regulated pools of capital run by managers that have great flexibility in applying their investment strategies.

hedging
The process of reducing the risk of loss from fluctuations in market prices — effectively locking in the value of a portfolio. Derivative securities can be used for this purpose.

high-water mark
A fund manager is paid an incentive fee only on net new profits. In essence, a high-water mark sets a bar (based on the fund's previous high value) above which the manager earns incentive fees.

hindsight bias
Refers to the belief that the outcome of an event was predictable, even if it was not. Therefore, people tend to overestimate the accuracy of their own predictions.

holding period return
A transactional rate of return measure that takes into account all cash flows and increases or decreases in a security's value for any time frame. Time frames can be greater or less than a year.

holdings-based style analysis
Examines each stock in the portfolio and maps it to a style at a specific point in time.

household budget
Outlines the individual or family income and expenditures on a periodic basis with the intention of determining how much money will be available for savings and investment.

hurdle rate
The rate that a hedge fund must earn before its manager receives an incentive fee. Hurdle rates are usually based on short-term interest rates to reflect the opportunity cost of holding risk-free assets such as T-bills.

I

implicit costs
Trading costs, which are measured by brokerage fees and turnover.

incentive fees
Fees that are usually calculated after the deduction of management fees and expenses and not on the gross return earned by the manager.

independent review committee
Under National Instrument 81-107, mutual funds must have an independent review committee which is required to either approve or consider conflicts of interest that are identified by the manager of the fund.

inflation
A generalized, sustained trend of rising prices.

inflation rate
The rate of change in prices.

initial public offering (IPO)
An issuing by a company that has never issued shares before. It requires an estimate of an appropriate offering price for the shares.

insider
An individual with inside information of material significance about his company that has not yet been made public.

insider trading
The act of trading in securities based on undisclosed material non-public information.

instalment debenture
A bond or debenture issue in which a predetermined amount of principal matures each year.

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institutional investor
A legal entity that represents the collective financial interests of a large group. A mutual fund, insurance company, pension fund and corporate treasury are just a few examples.

integrity
Acting in an honest, fair, and trustworthy way.

interest coverage ratio
A financial leverage ratio that reveals the ability of a company to pay the interest charges on its debt and indicates how well these charges are covered, based upon earnings available to pay them.

interest income
Income earned on fixed-income securities.

interest rate anticipation
A fixed-income investment philosophy that involves moving between long-term government bonds and very short-term T-bills based on a forecast of interest rates over a certain time horizon. Price sensitivity to interest rate movements increases as the term to maturity increases and the coupon decreases.

interest rate risk
The basic feature of interest rate risk is that as interest rates rise (fall), the value of all fixed-income securities will decrease (increase).

interest rates
For consumers, interest rates represent the gain from deferring consumption from today to tomorrow via saving. For businesses, interest rates represent the cost of borrowing money.

international funds
Mutual funds that invest anywhere in the world except in Canada.

interval funds
See Closed-End Discretionary Funds.

inventory turnover ratio
An operating performance ratio that measures the number of times a company's inventory is turned over in a year. It may also be expressed as a number of days required to achieve turnover.

investigation and prosecution
Violations are carefully scrutinized and offenders may be prosecuted; the commission has the authority to subpoena witnesses, seize documents for examination and assume many functions of an administrative tribunal. The securities commission may also prosecute an action against a violator. This may result in the levy of a substantial fine and/or imprisonment.

investment company
The firm that receives the management fees from each of the mutual funds under its control. The investment company is responsible for hiring investment managers and for organizing the distribution of the funds.

investment dealer
May act on the clients' behalf as agent in the transfer of instruments between different investors, and may also act as principal. Investment dealers are also referred to as brokerage firms or securities houses.

investment fund
Offers investors an interest in a pool of securities. Mutual funds are a type of investment fund.

investment horizon
The length of time within which an investor expects a given investment to satisfy his investment or return objectives.

Investment Industry Regulatory Organization of Canada (IIROC)
As of January 1, 2023, the former Investment Industry Regulatory Organization of Canada (IIROC) and the Mutual Fund Dealers Association of Canada (MFDA) were amalgamated to form the Canadian Investment Regulatory Organization (CIRO).

investment knowledge
How familiar an investor is with the risk and return characteristics of securities.

investment manager
(also known as a portfolio manager) Is responsible for constructing and managing the investment portfolios that make up the various mutual funds managed by an investment company.

investment policy statement
The statement that guides the overall asset management of the mutual fund portfolio.

investment portfolio
The fundamental characteristic is that it is a diversified collection of securities. Those securities may include stocks, bonds, money market securities, and even derivatives.

iShares CDN S&P/TSX 60 Index Fund
Units are traded on the Toronto Stock Exchange and are bought and sold through stockbrokers. The S&P/TSX 60 is composed of 60 of the largest Canadian firms.

J

January Effect
Stocks in general, and small stocks in particular, that move abnormally higher during the month of January.

K

Know Your Client
The mutual fund advisor must use due diligence to learn the essential facts relevant to every client and every order. Information concerning the client's personal and financial circumstances, investment needs and objectives, investment knowledge, risk profile, and investment time horizon, is required in order to make an appropriate investment recommendation.

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Know Your Product
Understand the characteristics (e.g. risk level, fees, type of income generated, and tax consequences) of all the funds offered for sale.

L

labour force
The sum of the population aged 15 years and over who are either employed or unemployed.

lagging indicators
An economic indicator that measures that change after an economy has passed through a phase in the business cycle.

leading indicators
An economic indicator that helps to determine which phase of the business cycle is likely to occur in the future.

legal responsibility
The responsibility of the investment guide to ensure that each client buys only suitable investments. All provincial securities acts make this legal responsibility clear.

leverage
The use of borrowed funds to invest.

liabilities
The obligation to provide goods, services, or cash at some time in the future. Simply stated: what is owed by a firm or an individual.

life annuity
An annuity whose payments are guaranteed as long as the investor lives.

life-cycle hypothesis
The basis of the hypothesis is that as people age, their objectives, financial and personal circumstances, and risk tolerance change as well. Though the hypothesis is not infallible, it can facilitate the task of "knowing your client."

Life Income Fund (LIF)
A termination option available to holders of locked-in pension funds such as a LIRA. A LIF is similar to a RRIF but it has both a minimum and a maximum annual withdrawal requirement. Funds from a standard RRSP are not transferable to a LIF.

life insurance
A contract between an insured holder and an insurer, where the insurer promises to pay a designated beneficiary a sum of money in exchange for a premium, upon the death of the insured person.

life withdrawal plan
Similar to the fixed-period plan, except the period selected is the expected remaining lifetime of the investor.

limit order
An order to buy or sell a security at a specific price or better.

limited partnership
A type of partnership whereby a limited partner cannot participate in the daily business activity and liability is limited to the partner's investment.

liquidity
Refers to the readiness with which an asset can be sold without requiring the seller to make a large price concession.

liquidity ratio
A financial ratio that attempts to determine a firm's ability to meet its short-term liabilities from its current assets. See Current Ratio.

load
Sales commission charged to individual investor. See Front-End Load.

Locked-In Retirement Account (LIRA)
When a registered pension plan is terminated prior to retirement (e.g. when an individual changes employers), plan funds may be transferred to a LIRA. The funds cannot be withdrawn before the holder reaches a designated age.

lock-limit up
When a commodity contract has reached it's permitted daily price limit on the upside, the commodity is said to trade lock-limit up. When lock-limit up (or lock-limit down on the downside), trading can only take place at the lock-limit up price or lower on that day.

Locked-In RRSP
The holder of a locked-in plan cannot withdraw any of the money until the holder reaches a particular age depending upon the province of residence.

long position
Signifies ownership of securities. "I am long 100 BCE common" means that the speaker owns 100 common shares of BCE Inc.

long-term liabilities
Are liabilities that are not likely to be paid off within one year.

loss aversion
A stronger impulse to avoid losses than to acquire gains.

M

macroeconomics
The field of assessing the performance, structure, and behaviour of the economy as a whole.

managed futures
Involves the active trading of derivatives products and strategies on physical commodities, financial assets and currencies.

managed products
Professionally managed portfolios of basic asset classes and/or commodities. Components of managed products could include segregated funds, hedge funds, commodity pools, closed-end funds and principal protected notes (PPN).

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management expense ratio (MER)
A calculation that is required under National Instrument 81-102. It allows investors to compare the level of management fees and expenses from one fund to another. It includes both management fees as well as fund expenses.

management fees
These fees are charged by all mutual funds and are deducted from the fund itself to pay the fund managers or investment advisory services.

margin
The amount that an investor is required to leave on deposit when using borrowed funds to purchase securities. The margin is usually a fixed percentage of the value of the securities.

margin account
An account that uses money borrowed from a stockbroker to buy securities.

marginal tax rate
Refers to the rate of tax to be paid on the next dollar of income earned from any source.

market
Any arrangement whereby products and services are bought and sold, either directly or through intermediaries.

market efficiency
This hypothesis argues that all available information about the markets is reflected in market prices, which is to say that it is impossible to earn excess returns by simply using publicly available information.

market order
An order to buy or sell a security at the current market price.

market ratios
See Value Ratios.

market review
A section of mutual fund financial statements where the fund manager explains what has happened to rates, and therefore the performance, of the fund over the recent past, and why. The fund manager also provides a forecast or outlook for the fund over the next few months.

market risk
Refers to the risk of fluctuations in the market as a whole — if the stock market is in a slump, this will influence a fund that invests in stocks. Even a highly diversified mutual fund has market risk.

market sentiment
The overall attitude of investors toward a particular stock or the stock market in general.

market timing
The act of shifting from one class of security to another (e.g. from bonds to stocks) based on expectations of where the economy or the markets may be heading.

marketable government bond
Bonds for which there is a ready market (i.e., clients will buy them because the prices and features are attractive).

material fact
A fact that, if correctly stated, would likely lead investors to change their purchase decision.

maturity date
The date at which the bondholder expects to get the par value of the bond back.

maturity guarantee
The minimum dollar value of the contract after the guarantee period, usually 10 years. This amount is also known as the annuity benefit.

mean
A central value of a set of numbers. Or, the sum of the values divided by the number of values. Also known as the average.

microeconomics
Refers to how the individual is affected by changes in prices or income levels.

minimum investment
An investor exemption from receiving a prospectus based on a prescribed minimum investment. NI 45-106 sets the minimum across Canada at $150,000.

momentum investing
A form of equity investing where proponents believe that strong gains in earnings or stock price will translate into stronger gains in earnings or stock price.

monetary aggregates
An aggregate that measures the quantity of money held by a country's households, firms, and governments. It includes various forms of money or payment instruments grouped according to their degree of liquidity.

monetary policy
The regulation, by a Government, of the money supply and available credit for the purpose of promoting sustained economic growth and price stability.

money laundering
The fact of accepting cash (or assets) obtained illegally and making it appear legitimate. It is a criminal offence punishable under Canada's Criminal Code.

money market funds
These are considered to be the lowest risk of all mutual fund investments. The fund invests in money market securities, such as T-Bills and commercial paper.

money purchase plan
A type of Registered Pension Plan; also called a Defined Contribution Plan. In this type of plan, the annual payout is based on the contributions to the plan and the amounts those contributions have earned over the years preceding retirement. In other words, the benefits are not known but the contributions are.

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money supply
The total amount of money available in an economy at a specific time.

mortgage
Essentially includes an obligation by the mortgagor to pay stipulated amounts on a debt that is secured by a pledge of property.

mortgage fund
Consists of a diversified portfolio of residential and some commercial mortgages. Some mortgage funds limit mortgages held to those insured under the National Housing Act (NHA). Default risk is lowered still by the fact that mortgages that are in default will often be purchased by the investment company's parent firm (i.e. the bank that booked the mortgage).

mutual fund
An unlimited number of units are issued by the fund and they are bought and sold directly by the fund itself. The value of a unit is not determined by market demand but by the net asset value of the securities in the fund's portfolio.

Mutual Fund Dealers Association (MFDA)
As of January 1, 2023, the former Investment Industry Regulatory Organization of Canada (IIROC) and the Mutual Fund Dealers Association of Canada (MFDA) were amalgamated to form the Canadian Investment Regulatory Organization (CIRO).

mutual fund sales representative
Individuals who are licenced to sell and provide advice on mutual funds products to their clients in the province or territory where they have been licenced.

N

National Instrument 81-101
A law adopted by the Canadian Securities Administrators (CSA) and followed throughout the country. It specifies the required structure and content of the mutual fund simplified prospectus.

National Instrument 81-102
A law adopted by the Canadian Securities Administrators (CSA) and followed throughout the country. It is a wide-ranging set of rules that deals with all aspects of the creation and management of mutual funds.

National Registration Database
Database for registration of applications for mutual fund salespeople.

natural resource funds
A type of specialized fund that invests in the securities of companies engaged in natural resource industries. Examples of such industries include mining, oil and gas, and forest products.

natural unemployment rate
Also called the full employment unemployment rate. At this level of unemployment, the economy is thought to be operating at close to its full potential or capacity.

net asset value per unit (NAVPU) or net asset value per share (NAVPS)
It is the net assets of the fund divided by the number of units outstanding.

net profit margin
A profitability ratio that indicates how efficiently the company is managed after taking into account both expenses and taxes.

net worth
Whatever an individual has accumulated to date is his net worth. It is the difference between the total assets and the total liabilities of an individual — what is owned less what is owed.

New Account Application Form (NAAF)
A form that is filled out by the client at the opening of an account. It gives relevant information to make suitable investment recommendations. The NAAF must be completed and approved before any trades are put through on an account.

no-load funds
This type of fund charges no sales fee and is predominately offered by subsidiaries of financial institutions.

nominal GDP
The dollar value of all goods and services produced in a given year at prices that prevailed in that same year.

nominal interest rate
The quoted or stated rate on an investment or a loan. This rate allows for comparisons but does not take into account the effects of inflation.

nominal return
The return on an investment that has not been adjusted for inflation. In the case of a bond it is simply the coupon rate.

nominee account
An account registered in the name of a dealer or third-party administrator on behalf of the beneficial owner of the mutual fund.

nominee owner
A person or firm (bank, investment dealer, CDS) in whose name securities are registered. The shareholder, however, retains the true ownership of the securities.

non-conventional mortgage
A mortgage that exceeds 80% of the appraised value of the property. This type of mortgage requires mortgage insurance under the "National Housing Act".

non-cumulative
A preferred dividend that does not accrue or accumulate if unpaid.

non-deposit-taking institution
Companies, such as life insurance companies, that do not take deposits. They acquire capital by pooling the premiums from policies they issue to individuals and then invest those premiums in capital market securities. In this way, they provide sufficient funds to satisfy the claims of policy holders.

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O

odd lot
A transaction in less than a board lot.

offering memorandum
A document that provides detailed disclosure, similar to a prospectus, but that is not reviewed by any regulatory agency and that does not provide investors with the same legal remedies.

Old Age Security (OAS)
Pension is payable at age 65 to all Canadian citizens and legal residents including landed immigrants and those with visitors' permits.

open mortgage
A type of mortgage that, at any time before the end of the term, can be repaid by the mortgagor (the borrower) without penalty.

open-end mutual fund (open-end fund)
See Mutual Fund.

open-end trust
The trust structure enables the fund to avoid taxation. Any interest, dividends or capital gains income, net of fees and expenses, is passed on directly to the unit holders. The fund does not incur tax liability.

open-market operations
Method through which the Bank of Canada influences interest rates by trading securities with participants in the money market.

operating expenses
In the case of a mutual fund, it refers to expenses that arise from the day-to-day activities of the fund. Examples include brokerage fees, securities filing fees, audit fees and administrative expenses.

operating performance ratios
Ratios that illustrate how well management is making use of the company's resources. These ratios include profitability and efficiency measures.

option contract
A derivative security which gives the holder the right, but not the obligation, to buy or sell the underlying asset within a fixed period for a fixed price.

option premium
This is the price an investor pays for an option.

organized exchange
The location (either physical or electronic) where buyers and sellers of securities are systematically matched.

output gap
The difference between real GDP (actual production) and potential GDP (what the economy is capable of producing). Economists use the output gap as an indicator to measure inflationary pressures.

overconfidence
Unwarranted faith in one's intuitive reasoning, judgments, and cognitive abilities.

over-contribution
An investment into an RRSP that exceeds the allowed amount of contribution. The over-contribution is not tax deductible, and the individual may be subject to a penalty if the over-contribution exceeds a cumulative lifetime over-contribution limit of $2000.

overnight rate
The interest rate that is set in a marketplace called the overnight market where major Canadian financial institutions lend each other money on an overnight basis.

over-the-counter (OTC)
The OTC market has no physical location as such. It is really a large computer network through which investment dealers negotiate transactions among themselves. Most bonds trade OTC but the shares of some small and large companies can also be traded OTC.

P

par value
This is the face value or the stated value of a bond or a preferred share. Securities may trade above, below, or at their par value.

pari passu
A legal term meaning that all securities within a series have equal rank or claim on earnings and assets. Usually refers to equally ranking issues of a company's preferred shares.

participation rate
The share of the working-age population in the labour force. The participation rate shows the willingness of people to enter the workforce and take jobs.

passive portfolio management
An investment management style employed by managers who believe that financial markets are efficient (that is, all available information is reflected in the price of a security) and therefore present no opportunity to earn significant excess returns. Proponents of this approach will seek to match the performance of a market segment or index by mimicking its risk and return characteristics. Unlike active managers, passive managers do not try to add value through strategies such as market timing and individual security selection.

Payments Canada
An organization that establishes, operates, and maintains systems for the clearing and settlement of payments among member financial institutions on behalf of their clients—individuals, businesses, and governments.

peer group
A group of managed products (particularly mutual funds) with a similar investment mandate.

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perfect negative correlation
The patterns of returns of different classes of securities are mirror images of each other, with the peaks of one security corresponding with the troughs of the other.

perfect positive correlation
The patterns of returns of different classes of securities match each other, with the peaks of one security corresponding with the peaks of the other.

performance assessment
The process of comparing a mutual fund manager's results with those of an established and reliable benchmark to determine if there has been a comparatively "good" return on investment.

performance averaging formulas
The method by which a PPN's final payoff is based not on the value of the underlying asset at maturity, but on some average performance of the underlying asset over the life of the note.

performance participation cap
A principal protected note with a performance participation cap promises to pay the return earned by some particular asset up to a maximum amount.

performance universe
A large number of other mutual funds with similar characteristics against which a mutual fund can be compared.

personal circumstances
These include clients' age, whether they are single or married, how many children they have, and what kind of lifestyle they wish to maintain. They have a major impact on the ability of the investor to bear risk and on the financial goals selected.

personal data
The personal information of a person that may include age, marital status, number of dependants, risk tolerance and health and employment status.

Personal Information Protection and Electronic Documents Act (PIPEDA)
The Act that provides protection for personal information and grants legal status to electronic documents.

Phillips curve
A graph showing the relationship between inflation and unemployment. The theory states that unemployment can be reduced in the short run by increasing the price level (inflation) at a faster rate. Conversely, inflation can be lowered at the cost of possibly increased unemployment and slower economic growth.

policy statements
Clarify the position of the securities commissions on various issues. They may be issued as national policies and instruments, provincial policies, or uniform policies, e.g. NI 81-101.

Pooled Registered Pension Plan (PRPP)
A type of retirement savings plan offered by the federal government. The plan is designed to address the gap in employer pension plan coverage by providing Canadians with an accessible, large-scale, low-cost pension plan.

portfolio allocation service
A type of fund wrap where the client owns units of several mutual funds in the proportions established through the allocation service.

portfolio asset allocation
This refers to the selection of the classes of securities to be held the proportions of equities, debt securities, and money market securities.

portfolio funds
Mutual funds that invest in other funds instead of buying securities directly.

portfolio investment objectives
Are most often presented in terms of the types of return that the portfolio should generate and, indirectly, the level of risk that will be assumed in order to earn those returns.

portfolio manager
A professional investor who selects the securities that belong to the portfolio.

potential GDP
The goods and services an economy is capable of producing when its existing inputs of labour, capital, and technology are fully employed at their normal levels of use.

pre-authorized contribution plan (PAC)
Automatic purchase plans or contributions, where investors can purchase units in regular installments throughout the year.

pre-authorized investment plan
See Voluntary Accumulation Plan.

precious metals funds
Specialized mutual funds that focus on securities related to precious metals, such as gold and silver.

preferred dividend funds
A type of fixed income fund that holds primarily dividend paying preferred shares and possibly common shares. Preferred dividend funds are distinguished from dividend funds by the fact that they tend to hold mostly preferred shares.

preferred shares
Preferred shareholders will receive a fixed dividend before common shareholders. They are granted voting rights only under special circumstances, and will receive a predetermined dollar amount (par value) should the company dissolve.

premium
The price of a fund is above the net asset value.

price-earnings ratio (P/E)
A shareholder ratio that shows how much investors are willing to pay for the current earnings of a firm and what they believe the firm's growth prospects are. It is calculated by dividing the current price per common share by the current EPS.

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primary market
This is the market for newly issued and underwritten securities that have never been offered to the public.

principal protected note (PPN)
A debt instrument. It has a maturity date upon which the issuer agrees to repay investors their principal. In addition to the principal, PPNs provide interest paid either at maturity or as regular payments linked to the positive performance of the underlying PPN asset. The underlying assets can be common stocks, mutual funds, stock indices, commodities, or hedge funds.

Privacy Commissioner
The federal law establishes a Privacy Commissioner as an oversight mechanism. Consumers have the right to file a complaint about any aspect of compliance with PIPEDA. Clients are entitled to file a complaint against a financial institution's apparent breach of compliance with the measures adopted in the federal law for the protection of their personal information. The Commissioner is empowered to receive complaints; conduct investigations; attempt to resolve complaints; and audit the personal information management practices of an organization.

private placement
The underwriting of a security and its sale to a few buyers, usually institutional, in large amounts.

probate
A provincial fee charged for authenticating a will. The fee charged is usually based on the value of the assets in an estate rather than the effort to process the will.

professional management
The fundamental service offered by mutual funds. It is the role of highly qualified portfolio managers to select investments that are likely to generate returns that reach certain performance targets.

professional responsibility
The responsibility of the investment guide to provide the best client service possible and to refuse to sell a product that is felt to be unsuitable.

profit
That part of a company's revenue remaining after all expenses and taxes have been paid and out of which dividends may be paid.

prohibited practices
Practices that are illegal or otherwise unacceptable to securities regulators.

prospectus
A legal document which must accompany all new security issues. It primarily outlines the financial condition of the issuer, the use to which the funds raised will be put, and the risk associated with the securities.

purchase price per unit
The total cost per unit an investor pays including any acquisition fees. It is calculated by dividing the NAVPU by 1 minus the acquisition fee percentage.

purchasing power
It is the ability of a dollar to buy goods and services. As purchasing power decreases, an individual is able to purchase fewer goods and services for the same amount of money.

Q

quartile (quartile rankings)
A ranking system that shows how well an individual security or mutual fund has performed compared to its peers. A first quartile ranking implies that the fund's performance is in the top 25%, or equivalently, that it outperformed 75% of its peers. A second quartile ranking implies that the fund's return is between 25% and 50% of the top performing funds. Funds within these two quartiles are deemed to be outperforming their peers. The bottom quartile, then, would include funds that are under-performing relative to their peers. It has been found to be highly unlikely that a fund will consistently remain in the top quartile over extended time periods.

Québec Pension Plan (QPP)
A mandatory contributory pension plan designed to provide monthly retirement, disability, and survivor benefits for all Quebec residents. Employers and employees make equal contributions.

quick ratio
A more stringent measure of liquidity compared with the current ratio. Calculated as current assets less inventory divided by current liabilities. By excluding inventory, the ratio focuses on the company's more liquid assets.

R

ratio analysis
A method of using various ratios to evaluate financial statements.

ratio withdrawal plan
A systematic withdrawal plan that allows mutual fund investors to regularly receive a fixed percentage of the fund value. If the ratio exceeds the total of income and capital appreciation, capital erosion will result.

real GDP
The dollar value of all goods and services produced in a given year valued at prices that prevailed in some base year.

real estate market
This is the market for commercial or residential properties.

real interest rate
The nominal rate of interest minus the percentage change in the Consumer Price Index (i.e., the rate of inflation).

real rate of return
This refers to the return on an investment over a given period after adjusting for inflation for the same period.

record keeping
The act of keeping and maintaining accurate financial records.

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redemption
A feature that allows the issuing corporation to redeem, or pay back, the bondholders before the stated maturity date. Also known as a call feature.

referral arrangement
An arrangement where a member is paid (or pays) a fee, including fees based on commissions (or sharing a commission), for the referral of a client to or from another person.

Registered Education Saving Plan (RESP)
A type of tax deferred savings plan that allows usually parents or grandparents to save for a child's education. Unlike RRSP contributions, annual RESP contributions are not tax deductible.

Registered Pension Plan (RPP)
A trust registered with Canada Revenue Agency and established by an employer to provide pension benefits for employees when they retire. Both employer and employee may contribute to the plan and contributions are tax-deductible.

Registered Retirement Income Fund (RRIF)
An RRSP termination option that allows the investor to retain the same investments as were held in the RRSP. A RRIF requires minimum annual withdrawals which must begin by the end of the second calendar year following the plan's initiation. Like RRSPs, RRIFs are transferable between financial institutions and an investor may have more than one.

Registered Retirement Savings Plan (RRSP)
Allows contributors to save some of their annual earned income, up to allowable limits, while deferring income taxes on the contributions. Any earnings held within the plan are sheltered from taxes but, upon withdrawal, are taxed as regular income regardless of their source (e.g., dividends, capital gains or interest).

registrar
Usually a trust company appointed by a company to monitor the issuing of common or preferred shares. When a transaction occurs, the registrar receives both the old cancelled certificate and the new certificate from the transfer agent and records and signs the new certificate. The registrar is, in effect, an auditor checking on the accuracy of the work of the transfer agent, although in most cases the registrar and transfer agent are the same trust company.

registration
Everyone who sells securities, or counsels and advises investors, must be registered with the appropriate provincial or territorial securities administrator. This is to monitor the competence and ethical behavior of people involved in the selling of securities.

regret aversion
People who are subject to regret aversion bias avoid making decisions because they fear, in hindsight, that whatever they decide to do will result in a bad decision.

regular dividend
A term that indicates the amount a company usually pays on an annual basis.

regulators
It is the role of regulators to define the limits of activity for the participants in the financial system and to ensure that financial market transactions are fair and in compliance with regulations.

regulatory bodies
Provincial and territorial securities administrators that are responsible for the administration of the provincial securities acts.

relative value strategies
Hedge fund strategies that attempt to profit by exploiting inefficiencies or differences in the pricing of related stocks, bonds, or derivatives in different markets.

Representativeness bias
An internal system for classifying objects and thoughts.

reset option
Allows the contract holder to protect profits inside the segregated fund.

retail investors
Individual investors who buy and sell securities for their own personal accounts, and not for another company or organization. They generally buy in smaller quantities than larger institutional investors.

retained earnings
Net income that is not paid out in the form of dividends but kept by the firm usually to finance growth.

retract
A feature which can be included in a new debt or preferred issue, granting the holder the option under specified conditions to redeem the security on a stated date – prior to maturity in the case of a bond.

return
The return or yield on a security includes any change in the value of the security over the holding period plus any cash flows (e.g. interest, dividends) received, all divided by the original price.

return on common equity (ROE) ratio
An operating performance ratio that indicates management's effectiveness in maintaining or increasing profitability in relation to the company's common equity capital.

returns-based style analysis
Comparing the fund's returns (usually 36 to 60 months of data) to the returns of a number of selected passive style indices.

reward-to-risk ratio
Provides an indication of how successful a fund is at earning a return given the level of risk it assumes to earn that return. It is calculated by dividing the fund's return by its standard deviation of returns.

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right of redemption
A mutual fund's shareholders have a continuing right to withdraw their investment in the fund simply by submitting their shares to the fund itself and receiving in return the dollar amount of their net asset value. This characteristic is the hallmark of mutual funds. Payment for the securities that have been redeemed must be made by the fund within two business days from the determination of the net asset value.

risk
See Volatility.

risk analysis ratios
Ratios that show how well the company can deal with its debt obligations.

risk averse
Descriptive term used for an investor unable or unwilling to accept the probability or chance of losing capital.

risk capacity
A client's ability to endure a potential financial loss.

risk profile
A description of the type of risk associated with a particular investment. Also refers to a combination of a client's risk tolerance and risk capacity.

risk tolerance
The financial and psychological readiness of an individual to bear the day to day fluctuations in the value of their investments. People who are unable to tolerate risk are said to be risk averse. Those who like to take risks are risk tolerant.

risk-adjusted rate of return
The rate of return that is adjusted for risk to be able to compare the performance of two securities on the same basis.

S

sacrifice ratio
Describes the extent to which Gross Domestic Product must be reduced with increased unemployment to achieve a 1% decrease in the inflation rate.

safety of capital
An investment that is not likely to erode the capital of the investor will provide safety of capital. A money market mutual fund, for example, will satisfy this investment objective.

sales charges
A type of explicit cost paid to mutual fund sales representatives and financial advisors who recommend a company's funds to their clients.

sales commission
See Load.

savings
The amount of money not needed for current expenditures.

seasonal unemployment
Occurs as a result of industries where workers are not needed in certain parts of the year due to the seasonal nature of the industry.

secondary market
This is the market for securities that have previously been sold by the issuer. When an investor purchases a security through a broker, this is said to be a secondary market transaction.

second-order risks
Risks that are not related to the market, but to other aspects of trading, such as dealing, implementing arbitrage structures, or pricing illiquid or infrequently valued securities. Second-order risks include liquidity, leverage, deal-break, default, counterparty, trading, concentration, pricing model, security-specific and trading model risks.

sector rotation
A type of equity investing philosophy that is based on the belief that different industries will perform well during certain stages of the economic cycle.

sector trading
A fixed-income philosophy for bonds that involves varying the weights of different types of bonds held within a portfolio.

sector weighting
The selection of the specific industries from which stocks in a portfolio will be chosen.

secured bond
Bonds that include a promise to turn over an asset to the bondholders for liquidation if the corporation fails to make its coupon payments or pay the par value at maturity.

securities
Paper certificates or electronic records that evidence ownership of equity (stocks) or debt obligations (bonds).

securities administrator
A general term referring to the provincial regulatory authority (e.g., Securities Commission or Provincial Registrar) responsible for administering a provincial Securities Act.

securities commission
See Securities Administrator.

security
Paper certificates or electronic records that evidence ownership of equity (stocks) or debt obligations (bonds).

security analysis
Refers to the evaluation of risk and return characteristics of securities.

security selection
A fixed-income philosophy for bonds that involves fundamental and credit analysis and quantitative valuation techniques at the individual security level.

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segregated fund
Essentially, the life insurance industry's equivalent of a mutual fund. These pooled investments are sometimes called variable deferred annuities and, like mutual funds, investors purchase an interest in these funds based on their net asset value. Unlike mutual funds, the value of these investments is often guaranteed.

Self-Regulatory Organizations (SROs)
Associations that regulate the companies and the employees within a specific industry. For example, the Canadian Investment Regulatory Organization (CIRO) is the mutual fund industry's SRO for the distribution side of the mutual fund industry.

serial bond
A bond or debenture issue in which a predetermined amount of principal matures each year.

service fee
See Trailer Fee.

set-up fee
A one-time fee that is charged by some mutual funds the first time an investor purchases units.

seven-day yield
Calculated by dividing the ending net asset value by the fund's initial net asset value and then subtracting 1.

shareholder
A person who purchases a stock is a shareholder of the company that issued the stock.

shareholders' equity
Also known as net worth, this is what is left when liabilities are subtracted from assets.

Sharpe ratio
Similar to the reward-to-risk ratio, but it subtracts the T-bill rate from the return before calculating the ratio.

shelf registration
Registration of only a simplified prospectus for new issues.

short selling
This occurs when an investor sells a security that he does not own. This transaction is undertaken in order to benefit from a fall in the price of the security.

short-term bond fund
A type of fixed-income fund that combines the characteristics of a bond fund and a money market fund. This fund invests primarily in government bonds with maturities of up to five years (though mostly less than three years) and money market securities.

simple rate of return
It is the return earned by an investment over a given period without considering the effects of compounding. Simple rates are useful for looking at the consistency of returns.

simplified prospectus
For mutual funds, provides all of the information required under National Instrument 81-101 (risk factors of the fund, method of distribution, fees, investment objectives etc.).

small cap funds
Small capitalization funds, which means that the market value of the equity of the firm is relatively low, probably because the firm is small.

soft landing
A business cycle phase when economic growth slows sharply but does not turn negative, while inflation falls or remains low.

soft retraction
A type of retractable preferred share where the redemption value may be paid in cash or in common shares, generally at the election of the issuer.

sophisticated investor
See Accredited Investor.

source of capital
The only source of capital is savings. Capital comes from retail, institutional, and foreign investors.

specialty mutual funds
A category of funds that specialize in a particular industry (sector fund) or a distinctive type of security. These funds offer a lower level of diversification than other mutual funds and may therefore be somewhat riskier.

speculator
An investor who seeks out higher risk funds and investments that offer the possibility of high returns.

spousal RRSP
This type of plan allows a couple to divide the ultimate retirement income between them. See Registered Retirement Savings Plan (RRSP).

stability
The opposite of volatility. Stability refers to the amount of change in an investment over time. A stable investment is a safe investment.

standard deviation
A common measure of volatility in investment returns. It shows how spread out the returns are with respect to the average (mean) return. The higher the standard deviation, the riskier the investment.

standard equity funds
A mutual fund composed of Canadian common stocks that seeks to earn some combination of dividend income and capital gains.

standard trading unit
A fixed number of shares that constitute a trading unit. The common size is 100 shares, but it may be as large as 1000 shares depending on the stock exchange and the stock price.

standards of conduct
The code of conduct that mutual fund sales representatives should apply in their relationships with clients.

statement of changes in equity
A financial statement that shows the total comprehensive income kept in the business year after year.

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statement of comprehensive income
A financial statement which shows a company's revenues and expenditures resulting in either a profit or a loss during a financial period.

statement of financial position
A financial statement showing a company's assets, liabilities and equity on a given date.

statement of investment objectives
Mutual funds must set investment objectives and clearly state the types of investments that the fund will make in order to attain them.

status quo
The predisposition of people, when faced with a wide variety of options, to choose to keep things the same.

stock
Also called a share or equity. A stock represents an ownership interest in corporations. Typically, stocks do not have a stated maturity date and therefore fit within the definition of a longer-term security.

stock exchange
A marketplace where buyers and sellers of securities meet to trade and where prices are established according to supply and demand.

strategic asset allocation
An investor's mix of specific mutual funds or asset classes consistent with the investor's characteristics. The mix is determined mathematically based on capital market expectations.

structural unemployment
A form of unemployment resulting from a mismatch between demand in the labour market and the skills and locations of the workers seeking employment.

style analysis
The study of style drift (change in a manager's investment style over a period of time) in a fund's holdings or returns over time.

style drift
Changes in a manager's investment style over a period of time.

suitability
A registrant's major concern in making investment recommendations. All information about a client and a security must be analyzed to determine if an investment is suitable for the client in accounts where a suitability exemption does not apply.

supply
The quantity of a good or service that producers are willing to supply at a particular price during a given time period.

survivorship bias
A form of bias that affects comparison universes. As defunct portfolios drop out, they are excluded from rankings in subsequent quarters; therefore, a performance universe is a universe of survivors.

System for Electronic Document Analysis and Retrieval + (SEDAR+)
A web site containing all Canadian mutual fund documents including the simplified prospectus, annual reports, and annual information forms. Please visit www.sedarplus.ca.

systematic risk
The risk associated with mutual fund shares or units that can suffer in falling markets where unit values are subject to market swings.

systematic withdrawal plan
Allows a mutual fund investor to automatically redeem units on a regular basis. This type of plan is of benefit to investors who require cash payouts on which to live or to supplement their income.

T

T3 Form
Referred to as a Statement of Trust Income Allocations and Designations. When a mutual fund is held outside a registered plan, unitholders of an unincorporated fund is sent a T3 form by the respective fund.

T5 Form
Referred to as a Statement of Investment Income. When a mutual fund is held outside a registered plan, shareholders are sent a T3 form by the respective fund.

target-date funds
A mutual fund that adjusts its asset mix to move from riskier to more conservative as the maturity date of the fund approaches.

Tax-Free Savings Account (TFSA)
A Government sponsored saving plan where investment income earned in the TFSA is tax free.

technical analysis
Security analysis that is based on the premise that the only things that affects stock prices are supply and demand. This type of analysis may also involve looking for buy or sell signals by examining price movements or volume movements in stock charts.

term
The period during which a particular rate of interest on a mortgage stays in effect.

term to maturity
The time between the issuance of a fixed income security and its maturity date, at which the issuer will pay back the principal.

termination
Leaving the employer and transferring internally within the company to another province.

terrorist financing
Terrorist financing (proceeds for crime) provides funds for terrorist activity.

time-weighted maturity
See Duration.

time weighted return (TWR)
Also known as the geometric mean return, it involves adding 1 to each of the observed annual returns, finding the nth root of their product (where n is the number of annual returns), and finally subtracting 1.

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total assets
Includes the estimated market value of real estate, the value of all investments, and the value of all other assets held by the client.

total liabilities
Calculated by adding up the outstanding amount on mortgages and loans, as well as unpaid bills.

tracking error
The degree to which ETFs fails to mirror the index returns.

trading costs
The amount of brokerage fees and commissions paid to buy and sell securities within a mutual fund.

trailer fee
Is paid by mutual funds to compensate distributors for providing ongoing services to the mutual fund's clients. These fees are not borne by the fund's investors but by the investment company that manages the fund.

trailing commission
See Trailer Fee.

transfer agent
Is responsible for maintaining records of who owns the mutual fund's units. This function is usually performed by a trust company.

transfer fee
Is charged when a mutual fund investor wishes to switch investments out of one fund and into another fund with the same mutual fund company.

Treasury bill (T-bill)
A T-Bill is a short-term debt security issued by the government. T-Bills do not pay interest, instead they are sold at a discount and are redeemed for their par value at maturity.

trend ratios
Constructed by selecting a base period (usually treating the ratio for that period as 100) and then dividing the base period into subsequent periods. Trend ratios are useful for spotting trends and making comparisons between companies.

trust deed
This is the formal document that outlines the agreement between the bond issuer and the bondholders. It outlines such things as the coupon rate, if interest is paid semi-annually and when, and any other terms and conditions between both parties.

trustee
For bondholders, usually a trust company appointed by the company to protect the security behind the bonds and to make certain that all covenants of the trust deed relating to the bonds are honoured. For a segregated fund, the trustee administers the assets of a mutual fund on behalf of the investors.

trustee fee
Is charged to investors who hold mutual fund investments as stand-alone RRSP, RRIF, and RESP investments.

trustworthiness
The trait of deserving trust and confidence.

turnover rate
The proportion of a total fund's assets traded in a year.

U

underwriting
Occurs when a new issue is purchased by an investment dealer and the dealer bears the risk that the issue will be sold at the desired price. In a best efforts underwriting, the dealer does not assume the risk of guaranteeing that all or any part of an issue will be sold.

unemployment rate
A measure of the prevalence of unemployment. It is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force.

unique risk
The risk that a particular firm or industry will do poorly, regardless of the performance of the market as a whole. This type of risk can be eliminated through diversification.

unsolicited orders
Orders for mutual funds that have not been recommended by the salesperson but instead come from the clients.

users of capital
Individuals, companies, and governments that levy money by borrowing or issuing shares (companies only) for a number of reasons.

V

value investing
An equity investment philosophy that promotes a conservative approach to money management. Value investors want to buy a firm for less than what the assets in place are worth.

value ratios
Ratios that show the investor what the company's shares are worth, or the return on owning them.

variability
The amount of change in returns of an investment over a period of time.

variable annuity
An annuity where payments to the annuitant will fluctuate in keeping with the changes in the value of the mutual fund from which payments are made.

variance
Measures the extent to which the possible returns on a security differ from the expected return.

vested
The accumulated contributions in an employer-sponsored pension plan belong to the employee.

volatility
Volatility measures the periodic change in returns in relation to the average or mean return — the greater the change, the more volatile the investment. A volatile investment is a risky investment.

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voluntary accumulation plan
Allows the mutual fund investor to specify the amount and timing of the regular investments they are willing to make.

W

wealth
This is measured by the value of an investor's savings, investments, and assets. When their value grows at a rate that exceeds the inflation rate, wealth increases.

whipsaws
Rapid intraday or interday price swings in the market that may result in many short-term trading losses.

working capital
A company's total current assets minus its current liabilities.

working capital ratio
See Current Ratio.

Y

yield
See Current Yield and Effective Yield.

yield curve
A graph showing the relationship between yields of bonds of the same quality but different maturities. A normal yield curve is upward sloping depicting the fact that short-term money usually has a lower yield than longer-term funds. When short-term funds are more expensive than longer term funds the yield curve is said to be inverted.

yield to maturity
Shows the return expected over the life of a bond assuming the periodic coupon payments are reinvested at the yield to maturity. It takes into account the current market price of a bond, the time remaining to maturity, the par value, and the coupon rate.

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